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January 7, 2003

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Application by Verizon Maryland, Verizon Washington, DC and Verizon West Virginia for Authorization To Provide In-Region, InterLATA Services in States of Maryland, Washington, DC and West Virginia*, WC Docket No. 02-384

Dear Ms. Dortch:

Per the request of the Wireline Competition Bureau staff, Verizon is providing the attached copy of it's Application for Partial Reconsideration and Clarification of Order No. 12610 filed with the Public Service Commission of the District of Columbia on January 3, 2003. Please let me know if you have any questions. The twenty-page limit does not apply as set forth in DA 02-3511.

Sincerely,

Attachment

cc: G. Cohen
G. Gooke
G. Remondino

January 3, 2003

BY HAND

Sanford M. Speight, Esquire
Acting Secretary
The Public Service Commission
of the District of Columbia
1333 H Street, N.W.
Second Floor, West Wing
Washington, D.C. 20005

Re: Formal Case No. 962 – Verizon Washington, DC Inc.'s Application for Partial Reconsideration and Clarification of Order No. 12610 (Public Version)

Dear Mr. Speight:

Enclosed please find the original and fifteen (15) copies of Verizon Washington, DC Inc.'s Application for Partial Reconsideration and Clarification of Order No. 12610 (*public version*).

If you have any questions regarding this filing, please call me.

Respectfully,

Enclosure

cc: See Service List

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

IN THE MATTER OF THE IMPLEMENTATION OF THE DISTRICT OF COLUMBIA TELECOMMUNICATIONS COMPETITION ACT OF 1996 AND IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT OF 1996	)	**Formal Case No. 962**

VERIZON WASHINGTON, DC INC.'S APPLICATION FOR PARTIAL RECONSIDERATION AND CLARIFICATION OF ORDER NO. 12610

PUBLIC VERSION

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INTRODUCTION AND SUMMARY

Verizon Washington, DC Inc. ("Verizon DC"), pursuant to D.C. Code Ann. § 34-604(b), respectfully requests reconsideration and clarification of the December 6, 2002 Opinion and Order[1/] issued by the Public Service Commission of the District of Columbia ("Commission") regarding rates for unbundled network elements ("UNEs") in the District.

The rates the Commission set in the Opinion and Order are, as Commissioner Rachal notes, "some of the lowest . . . rates in the entire country."[2/] They do not come close to allowing Verizon DC to recover even its forward-looking TELRIC costs, and they certainly do not permit recovery of the actual costs Verizon DC will incur to provide CLECs with UNEs in the District on the robust network that Verizon DC actually operates today. These below-cost rates, far from "promot[ing] competition in the District of Columbia,"[3/] will instead provide an unfair and inappropriate reward to carriers that have not made any network investments in the District, and they will do so at the expense of Verizon DC and at the expense of facilities-based CLECs. They will also be at the expense of residents of the District, since, as Commissioner Rachal correctly observed, these rates will require District "ratepayers . . . to subsidize competition."[4/] Thus, the rates set forth in the Commission's Opinion and Order, which are set at only a fraction of the actual costs of providing the UNEs, are not only at odds with the clear language of the 1996 Telecommunications Act (the "federal 1996 Act") and the Takings Clause of the U.S. Constitution, but will come with consequences—a loss of network innovation, the delay and

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1/ Opinion and Order, *In the Matter of the Implementation of the District of Columbia Telecommunications Competition Act of 1996 and Implementation of the Telecommunications Act of 1996,* Docket No. 962-T-671, District of Columbia Public Service Comm'n (rel. Dec. 6, 2002) ("Opinion and Order").

2/ *Id.*, Dissent of Commissioner Rachal ¶ 1.

3/ *Id.* ¶ 106.

4/ *Id.*

denial of new services and products, and ultimately the degradation of the network upon which so many rely.

The Commission's Opinion and Order contains a number of errors that produce UNE rates well below any defensible measure of costs. Indeed, the rates ordered by the Commission not only violate the requirements of the federal 1996 Act, but are so low as to be confiscatory. If not corrected, these rates are so far below Verizon DC's actual costs that they would result in a taking of Verizon DC's property and fail to provide just compensation in violation of the Fifth Amendment to the U.S. Constitution. Verizon DC earned only 7.96% in 2001. By contrast, the inadequate cost of capital used by the Commission to set UNE rates was 10.46%. Notwithstanding that Verizon DC was already earning below the inadequate cost of capital found by the Commission, it has nevertheless been ordered to *reduce* its UNE rates. There can be no possible justification for ordering Verizon to reduce its rates when it is earning below what even the Commission found to be its cost of capital. While the Supreme Court has affirmed the lawfulness of TELRIC as a general methodology, it has also recognized that specific rates may result in a taking.[5/] That would in fact be the result here. Indeed, if even a small percentage of Verizon DC's lines were provided to CLECs as UNE-Ps at the rates ordered by the Commission, Verizon DC's rate of return would soon become *negative*. This cannot be what the Commission intended, nor what any reasonable interpretation of TELRIC would permit.

There is also clear evidence that the rates adopted in the Opinion and Order are in conflict with TELRIC and are erroneous, in the form of a "benchmark" comparison of the recurring rates ordered by the Commission with those ordered by the New York commission—rates the Federal Communications Commission ("FCC") has repeatedly declared to be no higher than allowed

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[5/] *See Verizon Communications, Inc. v. FCC*, 122 S. Ct. 1646, 1679 (2002) ("*Verizon Communications*").

under TELRIC and to which the FCC has looked when evaluating Verizon's rates in other states.[6/] This comparison demonstrates that the rates set by this Commission fall well outside "the range that the reasonable application of TELRIC principles would produce."[7/] For example, even though the loop *costs* in the District are approximately 74% of the equivalent costs in New York, according to the FCC's Synthesis Model, the loop *rate* adopted by the Commission is only *37%* of the New York loop rate. And, contrary to the Commission's assertion in the Opinion and Order, this comparison fully accounts for the density differences between the two jurisdictions. Indeed, when the differences between loop costs in the District and in New York are taken into account, the equivalent cost-adjusted loop rate in the District under this benchmark analysis would be $8.50—almost *double* the rate ordered by the Commission.

In its Opinion and Order, the Commission suggested that its rates for loop UNEs are defensible based on a straight *rate* comparison with other urban areas.[8/] But the Commission can draw no comfort from these city-to-city comparisons. First, the FCC has not engaged in the type of city-to-city comparison to which the Commission pointed, but has only compared rates and costs on a *statewide* basis. And even if city-to-city comparisons were somehow appropriate, the Commission's comparison rests on the fundamental misconception that *rates* can be compared without consideration of relative *costs*. As the federal 1996 Act expressly states, UNE rates must

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[6/] Neither the FCC nor any court has been asked to assess whether any of these rates pass Constitutional muster.

[7/] Memorandum Opinion and Order, *In the Matter of Joint Application by SBC Communications, Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communication Services, Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, 16 FCC Rcd 6237, 6276 ¶ 81 (2001) ("*Kansas/Oklahoma § 271 Order*").

[8/] Opinion and Order ¶¶ 269-71.

be "*based on the cost*" of providing the UNE.[9/] And, as the FCC has made clear, whether rates in different jurisdictions are comparable is meaningless without consideration of the cost differences between those jurisdictions.[10/]

The errors in the Commission's Opinion and Order are not limited to loop rates. The Commission's non-loop rates are also far too low, well below any reasonable measure of TELRIC rates, as confirmed by comparison to the FCC-approved New York benchmarks. While the FCC's Synthesis Model shows that aggregate non-loop *costs* in the District (for the port, switching usage, transport, and signaling) are 131% of those in New York, the aggregate non-loop *rates* set by the Commission are only about *33%* of their New York equivalents.[11/]

There are clear reasons why the rates set by the Commission do not come close to "benchmarking" the New York rates or otherwise complying with any rates that would be within the range TELRIC permits. First, the Commission simply made a number of important errors in calculating these rates. To cite just a few examples:

- While the Commission specifically noted that it agreed with Verizon DC that Universal Digital Loop Carrier ("UDLC") is necessary to provide certain dedicated services, the Commission's loop rate inexplicably fails to reflect *any* costs for UDLC.[12/]

[9/] 47 U.S.C. § 252(d)(1) (1996) (emphasis added).

[10/] *See, e.g.,* Memorandum Opinion and Order, *In the Matter of Application by Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks, Inc., and Verizon Select Services, Inc., for Authorization to Provide In-Region, InterLATA Services in Vermont,* 17 FCC Rcd 7625, 7644 ¶ 35 (2002) ("*Vermont § 271 Order*") ("[M]ere comparisons [of rates in different states] are insufficient to demonstrate a TELRIC violation.").

[11/] The New York rates are summarized at Attachment A. While Verizon DC provided evidence concerning the cost-adjusted New York rates, the Commission rejected this evidence on the basis that the FCC's public record, well-accepted Synthesis Model was not on the record. Opinion and Order ¶ 510. However, even under the strictest rules of evidence, this Commission has the power to take judicial notice of the FCC's factual and legal conclusions—as this Commission has done on any number of occasions.

[12/] *Id*. ¶¶ 262, 265.

- While the Commission recognized that "[a] rational entrant would leave spare capacity for unanticipated growth and other uncertainties[,]" and found that "AT&T's 100 percent utilization . . . factors do not reflect this concern,"[13/] the Commission inexplicably adopted a 100% fill factor for fiber feeder.[14/]

- The Commission confused the costs of installing plug-in and hardwired equipment.[15/]

- The Commission inappropriately applied a 100% new switch discount, which the FCC and the D.C. Circuit both found does not comply with TELRIC principles.[16/]

Second, in many instances, the Commission simply misapplied governing TELRIC requirements. Perhaps the most pervasive such error is the Opinion and Order's assumption that any proposed rate that is based in any part on Verizon DC's actual experience operating the existing network is automatically disqualified as "embedded" and thus not TELRIC-compliant.[17/] But as long as that actual experience reflects what would be expected in a forward-looking network, or is simply used as a source for data that is then adjusted to be forward-looking, it is entirely appropriate to use such real-world experience in formulating TELRIC rates. Indeed, real-world data presents the *only* rational starting place for determining forward-looking costs. As the FCC has specifically found, where data from the existing network mirrors what a carrier "would use today," or is used as a starting point and then adjusted "to reflect forward-looking

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[13/] *Id.* ¶ 209; *see also id.* ¶ 207 ("It is unlikely that a rational firm . . . would plan production facilities to serve 100 percent of the market.").

[14/] *Id.* ¶ 211.

[15/] *Id.* ¶ 241 (adopting the 1.2% installation cost factor that AT&T had proposed for *plug-in* equipment as the installation cost factor for *hardwired* equipment).

[16/] *Id.* ¶ 303.

[17/] *See, e.g.*, *id.* ¶¶ 211, 241, 255 (rejecting Verizon DC's fill factors, EF&I factors, and maintenance expenses based on use of existing network data).

criteria," rates based on that data comply with TELRIC.[18/] Yet because the Commission automatically rejected any Verizon DC proposal that was informed by Verizon's experience operating the network, it repeatedly accepted proposals by AT&T that were based on nothing but the pure speculation of AT&T's paid consultants—primarily AT&T witness Murray, an economist with absolutely no experience operating *any* network.

The Commission also erred in concluding that it was not bound by the requirement that UNE rates be assessed on the basis only of technology that is "currently available." Indeed, the Commission appears to have been under the mistaken impression that this requirement does not even exist,[19/] even though it is plainly articulated in FCC rule 51.505(b)(1)[20/] and is repeatedly emphasized in the Supreme Court's opinion in *Verizon Communications, Inc. v. FCC*.[21/] As a result of this fundamental misconception, which is plainly reversible error, the Commission determined loop rates based on the assumption that integrated digital loop carrier using GR-303 technology could be used to unbundle stand-alone loops.[22/] Yet the *uncontroverted* evidence in the record demonstrates that the particular capabilities that would be necessary to unbundle

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[18/] Memorandum Opinion and Order, *In the Matter of Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Georgia and Louisiana*, 17 FCC Rcd 9018, 9040 ¶ 36 (2002) ("*Georgia/Louisiana § 271 Order*").

[19/] Opinion and Order ¶ 261.

[20/] 47 C.F.R. § 51.505(b)(1).

[21/] *See Verizon Communications*, 122 S. Ct. at 1670 ("Finally, it bears reminding that the FCC prescribes measurement of the TELRIC 'based on the use of the most efficient telecommunications technology currently available,' 47 C.F.R. § 51.505(b)(1) (1997). Owing to that condition of current availability, the marginal cost of a most-efficient element that an entrant alone has built and uses would not set a new pricing standard until it became available to competitors as an alternative to the incumbent's corresponding element.").

[22/] Opinion and Order ¶ 265.

stand-alone loops over GR-303 have *not* yet been developed and the necessary facilities are *not* currently available for purchase.[23/]

The Commission's fundamental TELRIC errors also contaminate its decision concerning non-recurring rates. The Commission rejected Verizon DC's non-recurring cost model primarily on the basis that it models "embedded" costs, because the model uses current non-recurring work times as a starting place for assessing forward-looking work times.[24/] Yet as noted above, this is not only fully consistent with TELRIC principles as articulated by the FCC, it is also the only rational way to proceed. Indeed, in its recent decision approving Verizon's application for long distance relief in Delaware, the FCC specifically rejected the rationale on which the Commission relies here, and concluded that non-recurring rates based on Verizon's non-recurring cost model are TELRIC-compliant.[25/] The Commission's adoption of AT&T's non-recurring cost model reflects the Commission's other basic TELRIC error: the AT&T model assumes the use of automated systems to perform many tasks (and thus reduce or eliminate the associated costs), even though the record is clear that such systems do not exist in the network and are *not even available to purchase*.[26/]

In short, it is beyond cavil that the rates set by the Commission, which are well below the range that any reasonable application of TELRIC could produce, are clearly erroneous and

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[23/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 66-68; Tr. at 355 (Nurse) (acknowledging that the development work necessary to support GR-303 unbundling "hasn't been done").

[24/] Opinion and Order ¶ 417.

[25/] Memorandum Opinion and Order, *Application by Verizon New England Inc, Verizon Delaware Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Co. (d/b/a Verizon Enterprise Solutions), Verizon Global Networks Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services to New Hampshire and Delaware*, 17 FCC Rcd 18660, 18711 ¶ 86 (2002) ("*Delaware/New Hampshire § 271 Order*").

[26/] VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 16-17, 23-24.

confiscatory and will not survive judicial review.[27/] Verizon DC therefore respectfully requests that the Commission vacate its Opinion and Order setting forth these rates, and instead adopt rates that accurately reflect the record evidence in this proceeding and the provisions of TELRIC.

[27/] *See Michigan Bell Tel. Co. v. Strand*, 305 F.3d 580, 589 (6th Cir. 2002) (holding that a state commission decision applying § 251 will be upheld only if "it is the result of a deliberate principled reasoning process, and if it is supported by substantial evidence"); *see also U.S. West Communications, Inc. v. Thoms*, No. 4:97-CV-70082, 1999 WL 33456553, at *26 (S.D. Iowa Jan. 25 1999) (reversing state commission decision applying § 251 of the Act in the context of calling card number portability because it was not supported by record evidence); *Bell Atlantic-Washington, D.C., Inc. v. Public Serv. Comm'n*, 767 A.2d 262, 266 (D.C. 2001) (holding that the Commission's order to remove a public telephone in reliance on testimonial conjecture of a police officer that the phone was used for illegal purposes "fell short of providing a reasonable basis for the Commission's conclusion").

ARGUMENT

I. THE RATES SET BY THE COMMISSION ARE CONFISCATORY AND WOULD RESULT IN A TAKING OF VERIZON'S PROPERTY THAT REQUIRES COMPENSATION.

While the federal 1996 Act requires Verizon DC to turn over parts of its network for its competitors' exclusive use, the Act also requires that competitors pay a "just and reasonable" rate for this use, a rate that is based on cost.[28/] There is nothing novel about the federal 1996 Act's requirement that Verizon and other incumbent LECs be adequately compensated for the use of their networks. To the contrary, it is beyond dispute that in compensating a utility for use of its property serving the public, an agency may not set rates "so 'unjust' as to be confiscatory."[29/] Pursuant to this requirement, the Commission must set rates that allow Verizon DC "to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risk assumed."[30/] The rates set by the Commission in its Opinion and Order, however, are so low as not only to violate the express terms of the federal 1996 Act and the FCC's TELRIC rules, but also to result in confiscation of Verizon DC's network. Although the Supreme Court has affirmed the FCC's adoption of TELRIC as a methodology, the Court has recognized that ILECs may challenge specific UNE rates on the basis that those rates fail to provide constitutionally adequate compensation.[31/] Here, regardless of whether the Commission concludes that the rates set in this proceeding comply with TELRIC (which they plainly do not), the rates still fail to provide Verizon DC just compensation for its property, as

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[28/] 47 U.S.C. §§ 251(c)(3), 252(d)(1).

[29/] *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 307 (1989) (quoting *Covington & Lexington Turnpike Road Co. v. Sandford*, 164 U.S. 578, 597 (1896)).

[30/] *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944).

[31/] *See Verizon Communications*, 122 S. Ct. at 1679.

mandated by the Fifth Amendment. The Commission must consider Verizon DC's evidence demonstrating that the rates set in this proceeding are confiscatory, and adjust those rates to avoid a taking.[32/]

The confiscatory nature of the rates set in this proceeding is evident whether one looks at Verizon DC's costs, its revenues, or its rate of return. Evidence concerning each of these demonstrates that if Verizon DC were required to provide CLECs with, for example, UNE-P facilities at the rates set by the Commission, it would not come close to recovering its actual costs and would likely earn a negative return on equity. Such a result would inevitably "jeopardize the financial integrity" of Verizon DC's UNE business, and thus constitute an uncompensated taking in violation of the Fifth Amendment.[33/]

The first relevant comparison is between the $6.14 UNE-P monthly rate ordered by the Commission[34/] and the $24.84 UNE-P monthly rate proposed by Verizon DC in this proceeding.[35] In the Opinion and Order, the Commission concluded, albeit erroneously, that Verizon DC's proposed $24.84 UNE-P rate was based on the costs actually incurred by Verizon DC in

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[32/] *See, e.g., Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1176-79 (D.C. Cir. 1987) (where a regulated entity presents serious allegations on reconsideration that the rates the agency has set constitute a taking, failure to consider those allegations and the relevant evidence is reversible error); *see also Preseault v. ICC*, 494 U.S. 1, 11 (1990) (Constitution requires "reasonable, certain, and adequate provision for obtaining compensation at the time of the taking"). Indeed, the Commission should permit Verizon DC to submit evidence of its embedded costs so the Commission will be able to make an informed judgment as to the degree to which the rates set in this proceeding fail to provide Verizon DC with constitutionally adequate compensation.

[33/] *Duquesne*, 488 U.S. at 312.

[34/] The $6.14 rate represents the sum of the $4.29 loop rate approved by the Commission, $1.59 for switching, and $0.26 for transport, based on the 1329 actual minutes of use in the District in 2001. *See generally* Memorandum Opinion and Order, *In the Matter of Application by Verizon New Jersey Inc. et al. for Authorization To Provide In-Region, InterLATA Services in New Jersey*, 17 FCC Rcd 12275, 12296-98 ¶¶ 51-53 (2002) ("*New Jersey § 271 Order*") (describing process for calculating UNE-P rate).

[35/] The $24.84 UNE-P rate represents the sum of the $17.35 loop rate proposed by Verizon DC, $7.14 for switching, and $0.35 for transport, again based on 1329 minutes of use.

connection with those facilities in its existing network.[36/] In fact, however, Verizon DC's actual costs are far higher than the forward-looking rates it proposed.[37/] Even assuming, however, that the $24.84 rate proposed by Verizon DC does measure Verizon DC's actual costs rather than its forward-looking costs, the enormous $18.70 monthly recovery gap between the $6.14 rate set by the Commission and the $24.84 that the Commission concluded reflects Verizon DC's actual costs clearly demonstrates that the rates set by the Commission miss recovering Verizon DC's costs by a very wide margin. They are therefore confiscatory.[38/]

Furthermore, if all Verizon DC's access lines were leased to competitors as part of the UNE-P at the $6.14 rate set by the Commission, there would be approximately a *$200 million* annual shortfall between the revenue received by Verizon DC and its actual costs of providing UNEs. Specifically, if the $18.70 cost recovery gap per line is multiplied by 12 (to arrive at the yearly rather than the monthly shortfall) and then by 898,503 (the total number of Verizon DC's access lines in service at year end 2001[39/]), the total shortfall Verizon DC would incur would be approximately $200 million per year. That cannot be the result that TELRIC is designed to produce, and is certainly not one that the Constitution permits. Significantly, the Commission cannot justify the unconstitutional taking caused by these confiscatory rates by pointing to Verizon DC's competitive revenues or revenues under another sovereign's jurisdiction.[40/]

[36/] *See, e.g.*, Opinion and Order ¶¶ 211, 241, 255.

[37/] *See, e.g.*, VZ-DC Post-Hearing Initial Br. at 8-9, 82, 84.

[38/] In reality, the cost recovery gap is even more egregious, as the $24.84 rate proposed by Verizon DC was based on Verizon DC's forward-looking rather than actual costs; a rate based on Verizon DC's costs would be significantly higher than $24.84. *See, e.g.*, VZ-DC Post-Hearing Initial Br. at 8-9, 82, 84.

[39/] *See* ARMIS Report 43-07, Line 120.

[40/] *See Brooks-Scanlon Co. v. Railroad Comm'n*, 251 U.S. 396, 399 (1920); *Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133 (1930); *Michigan Bell Tel. Co. v. Engler*, No. 00-2087, 2001 WL 788359, at *4 (6th Cir. July 13, 2001)

The infirmity of the Commission's rates is also demonstrated by the fact that under those rates, Verizon DC's net income will drop to zero if CLECs purchase even a small fraction of Verizon DC's facilities at the UNE-P rate. As demonstrated below, based on the $18.70 per line cost recovery gap calculated above, Verizon DC's net income in 2001 would have been reduced to zero if less than 8% of its access lines had been sold at the Commission's UNE-P wholesale rates.

Line	Item	Source	Amount
1	Net Income	ARMIS 43-02, Line 790	**$** 14,733,000
2	Monthly Cost Recovery Gap Per Line	DC UNE-P Cost, Tab L8	**$** 18.70
3	Yearly Cost Recovery Gap Per Line	L2 x 12	**$** 224.40
4	Access Line Loss Needed to Reduce Net Income to Zero	L1/L3	65,655
5	Total Number of Access Lines	ARMIS 43-07, Line 120	898,503
6	Percent of Access Line Loss Needed to Reduce Net Income to Zero	L4/L5	**7.3%**

Of course, there is no reason to believe that the percentage of Verizon DC's lines that CLECs would purchase at the fire sale UNE-P rates set by the Commission would remain at or below 8%; if CLECs in fact purchase more than that amount—and Verizon's experience in other jurisdictions with substantially higher UNE-P rates supports that likelihood[41/]—the result will be a negative rate of return that would threaten Verizon DC's financial integrity. Such an outcome would not only be unjust, but also unquestionably would constitute an unconstitutional taking of Verizon DC's property.[42/] Furthermore, since the rates set in this proceeding certainly are "not

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(under *Brooks-Scanlon*, diversified enterprises cannot be "required to subsidize their regulated services with income from rates either deemed to be competitive, or with revenues generated from unregulated services").

41/ In New York, for example, as of June 30, 2002, CLECs used UNEs to serve approximately 15% of all access lines. *See Local Telephone Competition: Status as of June 30, 2002*, Industry Analysis and Technology Division Wireline Competition Bureau, Tables 6, 8 (2002).

42/ *See, e.g.*, *Duquesne Light Co.*, 488 U.S. at 312 (rates jeopardizing the financial integrity of a public utility an unconstitutional taking); *FPC v. Hope Natural Gas Co.*, 320 U.S. at 605.

sufficient to assure confidence in the financial integrity" of the UNE business, "so as to maintain its credit and to attract capital,"[43/] these rates will impair Verizon DC's ability to make further needed investments in its network, and thus will result in a decline in the quality of service Verizon DC is able to provide its customers.

Another way of observing that the rates set in this proceeding are unlawful is to compare the revenue that would be generated if all of Verizon DC's facilities were sold as UNE-Ps at the rate set in this proceeding with Verizon DC's actual comparable revenue for 2001 of approximately $292 million. As the chart below illustrates, even if one subtracts 14.79% (the resale discount figure set by the Commission for carriers that provide their own operator service/directory assistance ("OS/DA")) from the $292 million revenue number to account for costs associated with providing retail versus wholesale services, that still should leave wholesale revenue of approximately $249 million. Yet, the revenue Verizon DC would receive if all lines were sold as UNE-P would only be approximately $66 million—approximately *one-quarter* of Verizon DC's comparable revenues for 2001.

[43/] *FPC v. Hope Natural Gas Co.*, 320 U.S. at 603.

Line	Description	Source	Amount
1.	Total 2001 Basic Area Revenues	ARMIS 43-03, ROW 5001	$170,587,000
2.	Total 2001 Original Extended Area Revenues	ARMIS 43-03, ROW 5002	$473,000
3.	Total 2001 Other Local Exchanges Revenues	ARMIS 43-03, ROW 5060	$67,930,000
4.	Total 2001 End User Revenue	ARMIS 43-03, ROW 5081	$53,048,000
5.	Total 2001 State Access	ARMIS 43-03, ROW 5084	$383,000
6.	Total 2001 Operating Revenues	SUM (LINES 1-5)	$292,421,000
7.	LESS RESALE DISCOUNT (PER NEW ORDER)	DC APPROVED RESALE RATE	14.79%
8.	EXPECTED REVENUES OF WHOLESALE COMPANY	LINE 6 X (1-LINE 7)	$249,171,934
9.	UNE-P REVENUE PER MONTH (BASED ON ORDER)	DC PSC ORDER (06-DEC-02)	$6.14
10.	TOTAL NUMBER OF UNE-Ps (100% WHOLESALE COMPANY)	ARMIS 43-07, TABLE I, ROW 120	898,503
11.	TOTAL UNE-P REVENUE PER MONTH	LINE 9 X LINE 10	$5,516,808
12.	TOTAL UNE-P REVENUE PER YEAR	LINE 11 X 12	$66,201,701

Such a result cannot possibly pass muster under either TELRIC or the Constitution's Takings Clause.

Essentially the same results are evident from comparing the revenues Verizon DC would receive from selling all its lines at the Commission-ordered UNE-P rate with the actual costs it has incurred based on income statement data it files with the Commission annually. For example, as illustrated by the chart below, if one compares Verizon's filed capital and operating costs for the year 2001 (excluding 14.79% of costs, the resale discount set by the Commission as a measure of the portion of Verizon DC's costs that relate solely to its retail operations) with the revenues it would receive by selling all lines at the Commission-ordered UNE-P rate, there would be a shortfall of approximately **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** between its projected wholesale revenues and operating income before taxes.[44/] The result would be a return on average equity of **[BEGIN VERIZON DC PROPRIETARY]**

[44/] *See, e.g., Washington Gas Light Co. v. Pub. Serv. Comm'n*, 450 A.2d 1187, 1214 (D.C. 1982) (in fixing just and reasonable rates in the rate-making process, operating expenses and capital costs of the business must be considered).

VERIZON DC PROPRIETARY INFORMATION REDACTED[45/]

[END VERIZON DC PROPRIETARY] Such an outcome obviously does not come close to allowing Verizon DC to earn even the inadequate cost of capital used by the Commission to set UNE rates of 10.46%. Nor does it fulfill the Commission's obligation to provide "the utility with a reasonable opportunity to earn a rate of return sufficient to maintain the company's financial integrity, to attract necessary capital at a reasonable cost, and to compensate investors

[45/] **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**

fairly for the risks they have assumed . . . ."[46/] Indeed, given that Verizon's return in 2001 was already below the cost of capital set by the Commission, its decision to *reduce* rates even further is backward. Thus, this view of Verizon's income statement again demonstrates that the rates set by the Commission are unquestionably confiscatory.

However one examines the relevant cost and revenue data, the evidence unequivocally shows that the rates set by the Commission would not allow Verizon DC to come even close to generating enough revenue to cover its costs. As a result, the Commission must reexamine these rates in order to avoid implementing confiscatory rates in violation of TELRIC and the Constitution.

II. GENERAL STUDY INPUTS

A. The Commission Should Reconsider the Cost of Capital It Adopted in Its Order.

Although the Commission correctly found that Verizon DC's provision of UNEs in the District of Columbia is inherently risky, it failed to set a cost of capital that adequately compensates Verizon DC for those risks. As the Commission recognized, in providing UNEs, "Verizon DC faces regulatory risk that its competitors do not face because Verizon DC is required to offer UNEs to the CLECs at specified prices."[47/] In addition, the Commission correctly concluded that "there is uncertainty, and therefore risk, associated with the level of

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[46/] *Potomac Elec. Power Co. v. Public Serv. Comm'n*, 457 A.2d 776, 789 (D.C. 1983); *see also Potomac Elec. Power Co. v. Public Serv. Comm'n*, 380 A.2d 126, 132 (D.C. 1977) (a utility must have "a reasonable opportunity to earn a rate of return sufficient to maintain the company's financial integrity, to attract necessary capital at reasonable cost, and to compensate investors fairly for the risks they have assumed, while protecting the relevant public interests").

[47/] Opinion and Order ¶ 186.

demand for the provision of UNEs."[48/] Finally, the Commission agreed "that new technology increases the risk of bypass of the local loop."[49/]

Despite recognizing that Verizon DC faces heightened risks in providing UNEs, the Commission adopted a cost of capital of 10.46%—nearly 250 basis points lower than Verizon DC's conservative proposal of 12.95%[50/] and below the federally-authorized guidepost of 11.25% that represents a "mere starting point[], to be adjusted upwards if the incumbents demonstrate the need."[51/] As discussed below, the Commission made a number of critical errors in adopting its cost of capital.[52/] Correcting these errors would be consistent with the Commission's view of the risks Verizon faces as a provider of UNEs and with the FCC's directive that a cost of capital must "take[] into account not only existing competitive risks . . . but also risks associated with the regulatory regime to which a firm is subject."[53/]

48/ *Id.*

49/ *Id.* ¶ 182.

50/ Verizon DC made clear in this proceeding that its proposed cost of capital *understated* the risks of providing UNEs. Verizon recently updated its cost of capital analysis to account for the additional risk not previously captured and calculated a 17.93% cost of capital.

51/ *Verizon Communications*, 122 S. Ct. at 1677. The Commission incorrectly rejects Verizon's reliance on the Supreme Court's ruling, arguing that the FCC intended in the *Local Competition Order* to require an ILEC to specifically demonstrate increased competition to warrant a cost of capital higher than 11.25%. Opinion and Order ¶ 148 (citing First Report and Order, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 11 FCC Rcd 15499, 15856 ¶ 702 (1996) ("*Local Competition Order*")). But the Commission has never limited the "business risks" that may impact the cost of capital to actual competitive risks, but rather considers the broad range of risks that the incumbent faces, including the regulatory risks created by TELRIC pricing. *See* VZ-DC Cross Ex. 10 at 12 n.8.

52/ Verizon DC disagrees with other aspects of the Commission's cost of capital findings, but is only seeking reconsideration of a narrow set of errors.

53/ VZ-DC Cross Ex. 10 (FCC Reply Brief) at 12 n.8.

1. The Commission Adopted a Capital Structure That Conflicts With Its Finding That All Costs Should Be Forward-Looking, Not Backward-Looking.

Although the Commission agreed with Verizon DC that TELRIC requires "the cost of capital to be based on a forward-looking network," and that "a *market-based*, target capital structure is appropriate in deriving the forward-looking cost of capital for use in this proceeding,"[54/] it adopted a capital structure that is based, in part, on book value and that is therefore inherently *backward*-looking. In adopting AT&T's recommended capital structure of 65.5% equity and 34.5% debt,[55/] the Commission appears to have overlooked the fact that even AT&T concedes that its proposed structure is *not* market-based.[56/]

Indeed, AT&T acknowledges that a *market*-based capital structure would consist of 80% equity/20% debt, but then reduces the amount of equity by impermissibly factoring in the *book* value capital structure of telecommunications holding companies.[57/] As Verizon DC demonstrated, investors and analysts unanimously rely on market value, not book value, capital structures to determine the cost of capital.[58/] A market-based, target capital structure reflects a company's capital structure *valued at market prices*. Book value, in contrast, necessarily reflects embedded or historical costs. Indeed, the FCC has found that "[e]mbedded costs are the costs

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54/ Opinion and Order ¶ 160 (emphasis added).

55/ *See id.* ¶¶ 160-62.

56/ *See* AT&T/Covad Ex. 1B (Murray Reb.) at Ex. TLM-2, 36-37 (explaining that AT&T's proposed capital structure is based in part on book value).

57/ *See* Opinion and Order ¶ 157.

58/ *See, e.g.*, VZ-DC Ex. 2G (Vander Weide Reb.) at 30.

that the incumbent LECs carry on their accounting books that reflect historical purchase prices, regulatory depreciation rates, system configurations, and operating procedures."[59/]

The Commission also mistakenly based its determination of the capital structure on the amount of competition in the District, today and in the foreseeable future.[60/] But the appropriate capital structure depends not on how *competitiv*e the market will be in the "foreseeable future," but how investors *value* the assets of the company. Indeed, not even AT&T alleges that the level of competition in the District is relevant to determining the appropriate capital structure.[61/] If, as TELRIC assumes, investors value the assets of the company (the network) using market values, then they must also value the debt and equity of the company using market values as well. (Otherwise, the basic accounting identity that assets equal liabilities plus equity will not hold.) As Dr. Vander Weide demonstrated using telecommunications holding companies, which the Commission appropriately found engage in businesses that are *less* risky than the business of providing UNEs in the District,[62/] investors *value* these companies at a capital structure of 81.8% equity/18.2% debt.[63/] AT&T's own market value analysis is consistent with Dr. Vander Weide's findings.[64/] To be conservative, Verizon DC adjusted this number to a "target market value capital structure" of 75% equity and 25% debt.

[59/] *Local Competition Order* at 15819 ¶ 632.

[60/] Opinion and Order ¶ 191.

[61/] *Id.* ¶ 158. Instead, AT&T argues that the market value capital structure may understate the amount of debt in the long run. This claim is entirely unsupported by the record, and does not justify AT&T's use of a book value capital structure.

[62/] Dr. Vander Weide also analyzed the capital structure of S&P proxy companies. The Commission has rejected the use of these proxy companies; although Verizon DC disagrees, it is not seeking reconsideration of this ruling.

[63/] *See* VZ-DC Ex. G (Vander Weide Direct) at 52.

[64/] *See* VZ-DC Ex. 2G (Vander Weide Reb.) at 64.

Finally, even if the level of competition in the District were relevant to a capital structure analysis, which it is not, the Commission fails to acknowledge that AT&T's own witness, Ms. Murray, conceded to the FCC that the cost of capital must assume a *fully* competitive market to be consistent with the other assumptions in a TELRIC study: "[A]ll the model[']s assumptions have to be consistent. So, to the degree that it requires a competitive market to get all of the other assumptions, that would be true for the cost of capital as well."[65/] Indeed, the FCC has consistently made clear that forward-looking economic costs must "simulate[] the conditions in a competitive marketplace."[66/] The FCC reiterated this principle in granting Verizon MA's § 271 petition, stating that it has:

> determined that new entrants "should make their decisions whether to purchase unbundled elements . . . based on the relative economic costs of these options," and that such competitors would not be able to make such decisions "efficiently" unless the BOC was offering UNEs based on forward-looking economic costs. The Commission equated "efficient entry" with the availability of UNEs at forward-looking economic costs, which "*replicates . . . the conditions of a competitive market*." "Efficient entry" simply means that competitors seeking entry *will face the same sorts of costs they would face in a fully competitive market*, that is, TELRIC-based UNE rates.[67/]

Thus, even if the Commission were to base the capital structure on the level of competition, it would have to do so based on the assumption of a fully competitive market. In reality, however, the capital structure should be based on market valuation by investors.

65/ *See id.* at 26.

66/ *Local Competition Order* at 15846-47 ¶ 679 ("a pricing methodology based on forward-looking costs simulate the conditions in a competitive marketplace").

67/ Memorandum Opinion and Order, *In the Matter of Application of Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks, Inc., for Authorization to Provide In-Region, InterLATA Services in Massachusetts*, 16 FCC Rcd 8988, 9009 ¶ 42 (2001) (emphasis added) ("*Massachusetts § 271 Order*").

Accordingly, the Commission should adopt Verizon DC's proposed forward-looking, capital structure, instead of the backward-looking structure recommended by AT&T.[68/]

2. The Commission Improperly Rejected Verizon DC's Proposed Cost of Equity.

The Commission's second critical error in this area was its adoption of a cost of equity that understates the risks of providing UNEs in the District. In particular, the Commission departed from its traditional use of a single-stage DCF model, based on the mistaken belief that Verizon DC's analysis produced unreasonable results, and instead adopted AT&T's three-stage DCF model as a starting point. But as Verizon DC demonstrated, it is AT&T's three-stage DCF model that must be rejected, even for use as a starting point, because it produces the incongruous result that companies with *higher* risk have *lower* costs of equity.[69/] The growth rates in AT&T's DCF model also fail to correlate with the companies' price-to-earnings ratios.[70/] These results, which the Commission appears to have overlooked, are clearly unreasonable and conflict with well-established tenets of finance.

There is also no merit to the claim that Verizon DC's one-stage DCF model should be rejected simply because it assumes growth rates that would, after some period of time well into the future, grow faster than the economy as a whole.[71/] This observation, while technically

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[68/] The Massachusetts DTE recently agreed with Verizon's analysis of how investors value Verizon's assets, adopting a market value capital structure of 25% debt and 75% equity, resulting in an overall cost of capital of 11.45%. *See* Order, Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Pricing, Based Upon Total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided-Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts Resale Services in the Commonwealth of Massachusetts, Docket No. D.T.E. 01-20, MA Dep't of Telecommunications and Energy, 78 (July 11, 2002) ("*Massachusetts UNE Order*").

[69/] *See* VZ-DC Ex. 2G (Vander Weide Reb.) at 80-86.

[70/] *See id.* at 15.

[71/] The Commission's statement that Verizon DC failed to explain its DCF model, Opinion and Order ¶ 172, is simply false. Unlike AT&T, Verizon DC provided separate cost of capital testimony from its witness, Dr. Vander

correct, is irrelevant. Companies do not have to grow at the same rate forever for a single-stage DCF model to reasonably approximate how prices are determined in capital markets. Because future periods are discounted in the DCF model, the fact that the proxy groups would technically overtake the economy at some distant point in time has a relatively small effect on Verizon DC's proposed cost of capital.

In any event, putting aside the particular growth rates used in a DCF model, what matters most is whether, ultimately, the model produces a cost of equity that makes sense and is reasonable. As we discuss above, AT&T's three-stage DCF model produces bizarre and unreasonable results. Verizon DC's proposed cost of equity, on the other hand, produces a cost of equity that accurately, but conservatively, captures the risks of providing UNEs in the District. In fact, Verizon DC's proposal is supported by the **[BEGIN AT&T PROPRIETARY]** XXXX **[END AT&T PROPRIETARY]** cost of equity AT&T uses to evaluate its own investments in the local exchange market.[72/]

The Commission improperly dismissed the relevance of AT&T's own internal cost of capital estimate, arguing that AT&T's cost of capital is a "hurdle rate" that is inflated to offset the company's overestimate of returns.[73/] First, the Commission's reliance on the FCC's discussion of "hurdle rates" is misplaced; the FCC's discussion was made in the context of discussing the forward-looking cost methodology on a conceptual basis and did not address

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Weide, at each stage of pleadings, and this testimony extensively discussed the mechanics of the DCF model, including a critique of AT&T's three-stage model. *See* VZ-DC Ex. 2 (Vander Weide Direct); VZ-DC Ex. 2G (Vander Weide Reb.) at 13-15 (demonstrating the unreasonable results of AT&T's three-stage model).

[72/] Opinion and Order ¶ 197.

[73/] *Id.*

whether a particular competitor's internal cost of capital was probative in analyzing an incumbent LEC's proposed cost of capital.[74/]

Second, there is no record evidence that AT&T uses an excessively high "hurdle rate" in order to offset return estimates that are higher than warranted, nor has any party provided any such evidence in this proceeding. To the contrary, the record evidence produced by AT&T demonstrates that it considered some of the same factors included in Verizon DC's cost of capital, including the degree of risk in the local market. For example, AT&T calculated a risk premium of **[BEGIN AT&T PROPRIETARY]** XXXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX **[END AT&T PROPRIETARY]**.[75/] Thus, AT&T's internal view of the risks involved in providing local exchange service clearly contradicts the testimony of AT&T's witness that the local exchange market is not risky and supports Verizon DC's proposed cost of equity.

Thus, although the Commission acknowledges that AT&T's proposed 10.24% cost of equity "understates Verizon [DC]'s cost of equity related [to] the provision of UNEs,"[76/] its upward adjustment to AT&T's proposal does not go far enough and does not adequately account for all the risks the Commission acknowledged that Verizon DC faces in providing UNEs in the District. Verizon DC's proposed cost of equity, on the other hand, conservatively captures these risks and should therefore be adopted, particularly since it uses the same single-stage DCF model this Commission has traditionally used to set a company's cost of capital. AT&T has provided

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74/ *See Local Competition Order* at 15892 ¶ 689.

75/ *See* VZ-DC Ex. 2G (Vander Weide Reb.) at 64.

76/ Opinion and Order ¶ 188.

no credible reason for the Commission to depart from this well-established method of setting the cost of capital.

B. The Annual Cost Factors the Commission Adopted Are Unsupported by the Record and Fail To Recover Verizon's Costs.

1. The Commission Should Reconsider Its Rejection of the Forward-Looking To Current Conversion Factor ("FLC").

Throughout this proceeding, AT&T has misrepresented the Forward-Looking to Current Conversion Factor ("FLC"), claiming that it is a "thinly veiled attempt" by Verizon DC to recover its embedded costs.[77/] The Opinion and Order erroneously accepts AT&T's distortions and concludes that the FLC "increases expenses."[78/] But the Commission should reconsider its rejection of the FLC, because the Commission has been misled concerning the effect of (and purpose of) the FLC. As the state commissions in New York, Massachusetts, and Pennsylvania all have found, the FLC does not increase expenses, nor does it allow Verizon DC to recover its embedded expenses.[79/] Rather, the FLC is necessary to ensure that Verizon DC fully recovers its *forward-looking* expenses and that CLECs do not receive a windfall of artificially reduced phantom savings that ultimately will be subsidized by District consumers.

To put it simply, the FLC is necessary because the expenses Verizon DC used in the numerator of its cost factors already have been adjusted to be forward-looking, but the investment, in the denominator of those factors, reflects *embedded*, rather than forward-looking,

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77/ *Id.* ¶ 214 (citing AT&T Ex. A [Recurring Panel Direct] at 75).

78/ *Id.* ¶ 218.

79/ *See* Order on Unbundled Network Element Rates, *Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements*, Docket No. 98-C-1357, NY P.S.C., 61 (Jan. 28, 2002) ("*New York UNE Order*"); *Massachusetts UNE Order* at 88-91; Tentative Order, Generic Investigation Re Verizon Pennsylvania, Inc.'s Unbundled Network Element Rates, Docket No. R-00016683, PA P.U.C., 59-62 (adopted Oct. 24, 2002) (Proprietary Version) ("*Pennsylvania Tentative Order*").

investment. As is evident from the Commission's decisions in this case, the TELRIC level of investment inevitably will be determined to be *lower* than the embedded investment used to calculate Verizon DC's cost factors. The mismatch in the cost factor—*forward-looking* expenses divided by *embedded* investment—would lead to underrecovery of expenses if the cost factor were applied, without adjustment, to the lower TELRIC investment. As the New York commission noted in explaining the need for the FLC: "In a TELRIC context, the numerator of [the annual cost factor]—current expense—is significantly reduced to reflect forward-looking TELRIC assumptions, and unless the denominator is likewise reduced, the correspondingly lower factor, when applied to forward-looking TELRIC investment, will underrecover expenses to a degree not contemplated by the TELRIC method."[80/] In other words, if the forward-looking, TELRIC investment is lower than embedded investment, then, without some adjustment (i.e., the FLC), Verizon DC will not recover all of its forward-looking expenses.

For example, suppose that Verizon DC determines that its actual expenses to maintain a $1,000 piece of equipment are $150. Verizon DC then applies forward-looking adjustments to that expense figure, such as a productivity factor, to determine what it will cost in a "forward-looking environment" to maintain that same piece of equipment. Assume that the forward-looking expenses are only $100. The Annual Cost Factor ("ACF") would then be 0.10 ($100 in forward-looking expenses divided by $1,000 embedded investment). But if the Commission then determines that, in the forward-looking network, the appropriate TELRIC investment for the $1,000 piece of equipment is only $900, then applying that ACF of 0.10 to that TELRIC investment would yield expenses of only $90—$10 less than the $100 that *already has been determined as the correct level of forward-looking expenses*. The FLC corrects for this anomaly

[80/] *New York UNE Order* at 57.

by adjusting the investment to make it forward-looking, thus ensuring that expenses are not artificially reduced beyond the appropriate forward-looking adjustments that Verizon DC already has made. But the FLC ensures *only* that Verizon DC will recover the full $100 that has been identified as forward-looking expenses. Importantly, as this example shows, the FLC does *not* allow Verizon DC to recover its $150 of *embedded* expenses.

AT&T's claim that the FLC allows Verizon DC to recover embedded expenses rests solely on AT&T's incorrect assertion that Verizon DC did not adjust its expenses to make them forward-looking. In fact, Verizon DC calculated its forward-looking expenses by starting with its actual expenses for 1999 and adjusting them to make them forward-looking: by multiplying them by productivity and inflation factors; by reducing maintenance expenses for copper cable; and by assuming a more efficient mix of plant with a higher proportion of fiber.[81/] Moreover, the Commission's Opinion and Order directs Verizon DC to make additional adjustments to its expenses, such as eliminating advertising expenses, eliminating so-called Y2K expenses, and further reducing maintenance expenses.[82/] Thus, Verizon DC's expenses are already forward-looking. The FLC is necessary to make sure that Verizon DC's ACFs permit recovery of these forward-looking expenses.

Contrary to AT&T's claim and the Commission's findings, the CC/BC ratio is not an alternative to the FLC. A CC/BC ratio is designed to take embedded costs and convert them into *current* dollars.[83/] The CC/BC ratio does not account for the fact that, in a TELRIC proceeding, *current* investment will be reduced to be *forward-looking* investment. Thus, applying a CC/BC

[81/] *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 14-23.

[82/] *See* Opinion and Order ¶¶ 226, 255.

ratio to the denominator of the ACFs would create a ratio of *forward-looking* expenses to *current* investment—not, as AT&T suggests, *current* expenses to current investment[84]—because the numerator is *forward-looking* expenses not current expenses. An additional adjustment—akin to the FLC—accordingly would still be necessary to achieve the Commission's intention of using "the same years' dollars" for both the numerator and the denominator of the ACFs.[85] Indeed, that is precisely the purpose of the FLC: it converts the denominator of the ACF into *forward-looking* investment dollars, just as the numerator reflects forward-looking expense dollars. As the Massachusetts commission found:

> When calculating the Expense-to-Investment ratio ("E/I ratio"), there should be a consistency between the numerator and denominator in terms of the time period and network assumption . . . we agree with Verizon that as forward-looking expenses are used in the numerator, it is only logical to adjust the denominator (the current investments) by the FLC to make it forward-looking.[86]

The CC/BC ratio cannot translate embedded investment into *forward-looking* investment and thus has no place in a TELRIC study.[87]

Building on the example used above with the FLC, assume that Verizon DC has $150 of embedded expenses for a $1,000 piece of equipment. The CC/BC ratio could be used to convert the $1,000 embedded investment into current dollars—assume $1,200.[88] As in the previous

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[83] For example, the CC/BC ratio could be used to estimate how much a computer purchased in 1987 would cost in today's dollars. *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 24.

[84] Opinion and Order ¶ 219.

[85] *Id.* ¶ 218.

[86] *Massachusetts UNE Order* at 95.

[87] VZ-DC Ex. 2D (Recurring Panel Reb.) at 23-27.

[88] As Verizon DC explained in its testimony, CC/BC ratios are generally greater than one. *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 26. The average in the District is 1.401. Thus, because the CC/BC is applied to,

example, assume Verizon DC has determined that the forward-looking expense for that piece of equipment is $100. If the ACF is calculated using the ratio of forward-looking expenses to current investment (i.e., $100/$1,200), it will be approximately .083; if this is later applied to forward-looking investment of $900, then Verizon DC will recover only $75 in expenses, rather than the $100 that already has been identified as the appropriate forward-looking expenses. Thus, the CC/BC clearly is not an appropriate mechanism for ensuring the recovery of forward-looking expenses.

In short, the Opinion and Order appears to embrace AT&T's proposed CC/BC ratio, rather than the FLC, simply because the CC/BC ratio results in lower expenses. But applying the CC/BC ratio and ignoring the fact that Verizon DC already has adjusted expenses to be forward-looking *before* calculating the ACFs, the result is that expenses are arbitrarily reduced *below* the level of forward-looking expenses determined by the Commission in this proceeding. Applying Verizon DC's proposed FLC is the only way to assure that Verizon DC fully recovers its forward-looking expenses. Indeed, the Massachusetts and Pennsylvania commissions rejected the CC/BC ratio but adopted Verizon's proposed FLC.[89/]

2. The Opinion and Order Improperly Reduces Verizon DC's Forward-Looking Maintenance Expenses.

The Opinion and Order correctly rejects AT&T's entirely hypothetical adjustment to maintenance expenses, finding that "the record does not support a finding that the 30% adjustment [to maintenance expenses] that AT&T suggests is accurate."[90/] Rather than adopt the

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and increases, the denominator in the ACF calculations, it reduces the ACF and the overall expenses that are recovered.

89/ *See Massachusetts UNE Order* at 96-97; *Pennsylvania Tentative Order* at 57-62.

90/ Opinion and Order ¶ 255.

accurate—and forward-looking—maintenance expense reduction proposed by Verizon DC, however, the Commission instead arbitrarily selected a 20% reduction in maintenance expenses as the value it was prepared to deem "reasonable."[91/] But there is no record evidence to support the Commission's apparent "compromise" figure of 20%, which would significantly and improperly reduce Verizon DC's ability to recover its forward-looking maintenance expenses and therefore adversely affect Verizon DC's ability to maintain the District's telecommunications network at the same level of quality that exists today.

To begin with, the Commission appears to have based its decision on the misconception that Verizon DC's "adjustment for maintenance . . . expenses is based on its own embedded network."[92/] But that is not the case. As the Commission correctly noted,[93/] Verizon DC reduced its copper cable maintenance expenses by 5% in order to reflect the specific reduction in expenses that Verizon DC's experienced engineers anticipate from the assumed replacement of the old copper in the network with new copper.[94/] But this does not mean that the total maintenance expenses produced by Verizon DC's forward-looking studies are only 5% less than the total cable maintenance expenses in the existing network. To the contrary, Verizon DC's forward-looking expenses are significantly lower because Verizon DC assumed a dramatically different mix of fiber and copper cable for its forward-looking network than what exists in the network today. By assuming the forward-looking network will contain a much higher percentage of fiber cable than copper cable, Verizon DC's studies produce significant reductions

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91/ *Id.*

92/ *Id.*

93/ *Id.* ¶ 251.

94/ *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 27.

in forward-looking maintenance expenses because fiber cable, on average, is less costly to maintain than copper cable.[95/]

Accordingly, the Commission erred in rejecting Verizon DC's maintenance expense adjustment as producing "embedded" expenses. Nor is there any basis whatsoever for the Opinion and Order's arbitrary 20% reduction. The Commission expressly found that AT&T had not supported its proposed 30% reduction in expenses.[96/] While the Commission seems to have been motivated by a general sense that expenses should be reduced further in the forward-looking network, that conclusion is not supported by the record. In fact, in endorsing Verizon's 5% reduction in copper repair expenses, the Pennsylvania Commission agreed with the administrative law judge, who found that "[t]here is no reason to expect that over the life of the forward-looking network, repair expenses for an established technology like copper cable will decline dramatically."[97/] There is simply no basis for the Commission's 20% reduction, and the reduction made by Verizon DC is sufficient and should be adopted.

The Commission also should clarify that any reduction in maintenance expenses should not apply to "M" dollars, i.e., expenses for moves and rearrangements of plant.[98/] "M" dollars cover activities such as relabeling the pair identifications on a distribution terminal and raising or

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95/ VZ-DC Post-Hearing Initial Br. at 41; VZ-DC Ex. 2D (Recurring Panel Reb.) at 22. AT&T's own testimony states that the network expense ratio for aerial fiber cable is approximately one-fourth of the factor for aerial metallic cable. AT&T Ex. A (Recurring Panel Direct) at 74.

96/ Opinion and Order ¶ 255. The Commission was not persuaded by AT&T's attempt to use selectively chosen Maryland documents, which, as Verizon DC showed, do not establish any expected reduction in copper maintenance expenses. *See* VZ-DC Post-Hearing Initial Br. at 41-42. The Pennsylvania commission likewise rejected AT&T's selective reliance on these documents. *See Pennsylvania Tentative Order* at 129-30.

97/ Pennsylvania Recommended Decision, *Generic Investigation Re Verizon Pennsylvania, Inc.'s Unbundled Network Element Rates*, Docket No. R-00016683, PA P.U.C., 51 (rel. May 3, 2002) (Proprietary Version) ("Pennsylvania Recommended Decision") (approved by *Pennsylvania Tentative Order* at 129-30).

98/ AT&T's compliance runs applied the 20% reduction in maintenance expenses to "M" dollars as well as repair expenses.

lowering an existing cable around an obstruction, and these activities are often caused by the movement of customers, municipal requirements, and other necessary network changes. Such activities do not become less frequent—or less expensive—simply because old copper plant is replaced with newer copper plant.[99/] Indeed, there is no correlation whatsoever between the two. Not surprisingly, then, AT&T failed entirely to support its claim that replacing old copper would result in reduction of "M" expenses, much less a reduction of 20% or 30%. Thus, even if the Commission were to conclude, erroneously, that its 20% reduction for *maintenance* expenses is proper, that same adjustment is clearly insupportable with respect to "M" dollars (movement and rearrangement expenses).

3. The Opinion and Order Miscalculates the Common Overhead Factor.

The Opinion and Order states it calculated a "corrected" Common Overhead Factor of 6.62% by eliminating the FLC.[100/] According to the Opinion and Order, the Commission adjusted Verizon DC's Common Overhead Factor. When Verizon DC calculates the Common Overhead Factor as directed by the Commission, however, Verizon DC derives a Common Overhead Factor of 7.36%. In its workpapers, AT&T similarly derives a higher Common Overhead Factor of 7.40%. Verizon DC has not been able to determine how the Commission calculated its different, lower Common Overhead Factor, and thus cannot explain the difference between its (and AT&T's) number and the number calculated by the Commission. Verizon DC therefore believes the Commission has erred in computing the Common Overhead Factor, since

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99/ *See* VZ-DC Post-Hearing Initial Br. at 43 n.124; VZ-DC Ex. 2D (Recurring Panel Reb.) at 29-30.

100/ Opinion and Order ¶¶ 229, 230. As discussed *supra*, Verizon DC believes that the Commission mistakenly rejected the FLC and is seeking reconsideration of that decision.

there is no record evidence to support the Commission's number, and therefore seeks reconsideration on this issue.

4. Verizon DC Properly Excluded Y2K Expenses in Its Compliance Run.

The Opinion and Order incorrectly states that "Verizon DC did not exclude Y2K expenses from" its compliance runs.[101/] As shown in Verizon DC's file, Part G-8 - DC VZ2000Wothsupt COMP 11-02.xls, WP4, Line 1, however, the information management expenses Verizon DC actually used in its compliance filing are $668,282,111, which clearly excludes Y2K expenses of approximately $40 million. The Commission's conclusion that Verizon DC did not exclude Y2K expenses is based on its review of a different file, Part G-2f - CommOH Info Mngmnt.xls, which shows information management expenses of $708,354,880.[102/] However, that file, which Verizon DC agrees does not exclude Y2K expenses, was not used in calculating the other support factor in Verizon DC's compliance filing. Thus, Verizon DC's compliance run properly reflects the exclusion of Y2K expenses and the Commission's conclusion to the contrary was clearly erroneous.[103/]

101/ *Id.* ¶ 516. Verizon disagrees that Y2K expenses should be excluded from Verizon DC's cost studies but is not seeking reconsideration of this issue.

102/ Verizon DC inadvertently provided this file with its November filing. The correct backup file is Part G-2f - DC Comp 672baw99Y2K.xls. That backup file was provided to the Commission in April 2002 and is attached to this filing as Attachment B (Proprietary).

103/ Indeed, AT&T's calculation of Verizon DC's information management expenses ($668,711,345) are approximately the same as—in fact, slightly *higher* than—Verizon DC's calculation.

III. RECURRING COSTS

A. The Loop Rates Adopted by the Commission Are Too Low, Are Not Comparable to Rates in Other States, and Reflect Numerous Input Errors That Should Be Reconsidered and Corrected.

The Commission defends its low loop rates—and rejects those proposed by Verizon DC—on the basis of a fundamentally flawed comparison to loop rates in other jurisdictions. The Commission suggests that "comparison with other jurisdictions is useful to help check the reasonableness of Verizon DC's and AT&T's proposed UNE rates."[104/] But, as the FCC has long recognized, such a comparison is entirely meaningless unless it also accounts for the relative loop *costs* in the two jurisdictions being compared. Thus, the "benchmark" test that the FCC has developed and endorsed as the valid means of comparing rates between jurisdictions specifically includes a comparison of *costs*, and thus permits a meaningful evaluation of rates on a *cost-adjusted* basis. Specifically, the FCC compares the relevant rates only in relation to the state-specific costs derived using the FCC's Universal Service Fund Synthesis Model. That model predicts costs for every state and for the District of Columbia, accounting for factors such as terrain, demand, and variations in the density of customer locations. Rates are deemed comparable only where "the percentage difference between the applicant state's rates and the benchmark state's rates does not exceed the percentage difference between the applicant state's costs and the benchmark state's costs, as predicted by the [Synthesis] model."[105/]

[104/] Opinion and Order ¶ 268.

[105/] Memorandum Opinion and Order, *In the Matter of Application of Verizon Pennsylvania Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks, Inc., and Verizon Select Services Inc., for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*; 16 FCC Rcd 17419, 17457-58 ¶ 65 (1991) ("*Pennsylvania § 271 Order*"); *Kansas/Oklahoma § 271 Order* at 6274 ¶ 77, 6277-78 ¶¶ 83-84; *see also Massachusetts § 271 Order* at 8999-9009 ¶¶ 21-42. For example, in the context of a § 271 application, if the applicant state's rates are 9% higher than the benchmark state's rates, but the relative *costs* of providing service in the applicant state, as predicted by the FCC's model, are 10% higher than relative costs in the benchmark state, the applicant state will pass the test. However, if rates in the applicant state are 20% higher and costs remained only 10% higher, the applicant state will not pass the test.

The FCC's benchmark analysis makes clear that a simple comparison between rates in two jurisdictions is inappropriate unless that comparison also accounts for cost differences. Yet the Opinion and Order compares District of Columbia loop rates to loop rates in Chicago, Boston, Cleveland, Detroit, and Manhattan, without taking account of the relative cost differences among those cities. There is no question, for example, that line densities in Manhattan far exceed line densities in the District—in fact, line density in Manhattan is over four times the line density in the District, according to the Synthesis Model—and that costs in Manhattan are accordingly significantly lower than those in the District, notwithstanding that both jurisdictions are dense urban areas. Without also considering such cost differences, the comparisons upon which the Commission has relied are meaningless. It may be that the Commission felt constrained from comparing costs based on its conclusion that the Synthesis Model was not "on the record in this proceeding."[106/] However, the Commission was no more constrained from taking judicial notice of the Synthesis Model, which has been described and presented in orders of the FCC and is publicly available on the FCC's web site,[107/] than it was from taking notice of the loop rates from other cities, and yet the Commission freely used the latter as evidence to support its conclusions regarding loop rates for the District. If the Commission believes it is appropriate to exclude the familiar, publicly available, established FCC model from the record in this proceeding on that basis, there is *no valid means* of comparing the rates adopted in the Opinion and Order with those from other jurisdictions, and the Commission's reliance on these flawed comparisons was improper and erroneous.

[106/] Opinion and Order ¶ 510.

[107/] *See, e.g.*, Tenth Report and Order, *In the Matter of Federal-State Joint Board on Universal Service*, *In the Matter of Forward-Looking Cost Mechanism for High-Cost Support for Non-Rural LECs*, 14 FCC Rcd 20156

In fact, there is no valid reason for the Commission *not* to use the publicly available Synthesis Model to make an appropriate and valid assessment of the comparability of the D.C. rates to rates from other jurisdictions. Were the Commission to do so, it would be immediately evident that the rates ordered by the Commission are well below the TELRIC-compliant range. For example, the Commission's D.C. loop rate is substantially lower than the New York "benchmark" loop rate: The Commission-approved loop rate is only 37% of the New York loop rate, even though the Synthesis Model predicts that loop *costs* in the District are about *74%* of the equivalent costs in New York. Put differently, using New York State as the benchmark, the equivalent, cost-adjusted loop rate in the District would be about $8.50 per month, almost *double* the rate the Commission has set here. The D.C. rate is thus inexplicably below the TELRIC range that would be predicted using the FCC's methodology and New York rates as a benchmark.

While the Commission concludes that it cannot compare loop rates in the District to statewide average loop rates "because of vast differences in population density,"[108/] this statement is simply not true. The FCC has expressly determined that the Synthesis Model "provides a reasonable basis for comparing cost differences between states" and that it "accurately reflects the relative cost differences among states" (including the District of Columbia, which the model treats as a "state").[109/] The differences for which the model accounts, as noted above, specifically

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(1999) ("*USF Tenth Report and Order*"); Federal Communications Commission, Hybrid Cost Proxy Model (Dec. 18, 2001) <http://www.fcc.gov/wcb/tapd/hcpm/welcome.html>.

[108/] Opinion and Order ¶ 269.

[109/] *See, e.g.*, *Kansas/Oklahoma § 271 Order* at 6277 ¶ 84.

include distinctions in geography, demand, and variations in the density of customer locations.[110/] Thus, for example, the cost relationships produced by the Synthesis Model account for the relative geographies and densities in the District and New York State, and consequently correctly reflect lower loop costs in the District than in New York. For this reason, in conducting its benchmark test, the FCC has compared rates and costs only on a statewide basis, and has never suggested that city-to-city or region-to-region comparison would be appropriate. Any appropriate comparison in this case must therefore use the Synthesis Model's predicted *statewide* costs and rates, not costs and rates in a specific region within a state. The results will, by the nature of the Model, account for all relevant differences in geography and line density.

1. The Commission Should Reconsider Its Decision Concerning Verizon DC's DLC EF&I Factor.

While adopting a 1.2% EF&I factor "for the loop," the Commission at the same time adopted a 20% EF&I factor for DLC plug-in equipment.[111/] Given the evidence adduced by *all* parties in this case that hardwired equipment is more expensive to install than plug-in equipment, this determination simply makes no sense, and it appears that the Commission may simply have inadvertently transposed the two factors. AT&T specifically argued that there should be two separate factors and that the plug-in-*only* factor should be 1.2% because, in its view, the costs of installing plug-in equipment is negligible, and a combined hardwired and plug-in equipment

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110/ *See* Memorandum Opinion and Order, *In the Matter of Application by Verizon Virginia, Verizon Long Distance Virginia, Inc., Verizon Enterprise Solutions Virginia, Inc., Verizon Global Networks Inc., and Verizon Select Services of Virginia, Inc., for Authorization to Provide In-Region, InterLATA Services in Virginia*, WC Docket No. 02-214 ¶ 104 (Oct. 30, 2002) ("*Virginia § 271 Order*") ("The differential produced by the [Synthesis] model reflects variations in forward-looking costs based on objective criteria, such as density zones and geological conditions."); *USF Tenth Report and Order* at 20171 ¶ 301 ("[T]he model reflects differences in structure costs by using different values for the type of plant, the density zone, and geological conditions.").

111/ Opinion and Order, Table 6.

installation factor overstates the costs of installing plug-ins.[112/] While Verizon DC contends that AT&T's proposal actually produces skewed results, one thing is clear: All parties agree that plug-ins are less costly to install than hardwired equipment. Accordingly, *nothing* in the record supports, and *no* party argued for, an EF&I factor for *all* DLC equipment that was *lower* than the EF&I factor for plug-ins.

As Verizon DC detailed in its testimony, each Remote Terminal ("RT") contains two types of electronic equipment: hardwired (or "common") equipment and service plug-ins. The hardwired, common equipment consists primarily of shelf units that have a fixed number of ports (typically 24 or more) for service plug-ins.[113/] A service plug-in is a card that provides transmission and signaling functions (e.g., analog to digital conversion and line power) for a small number of individual lines (eight or fewer).[114/] The service plug-ins are comparatively easier to install than the hardwired equipment, because the plug-ins have been designed so that they can be added in small numbers as the demand for lines increases (provided that the installed RT common equipment shelf capacity is sufficient to accommodate additional plug-in cards).[115/]

As noted above, in its testimony and briefs, AT&T argued that a separate EF&I factor, amounting to 1.2% of investment, should be created and applied only to plug-in equipment.[116/] AT&T argued that this result is supported by Verizon DC's "historical data."[117/] Moreover, this

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[112/] AT&T Ex. A (Recurring Panel Direct) at 66-67.

[113/] VZ-DC Ex. D (Recurring Panel Direct) at 78.

[114/] *Id.*

[115/] *Id.* at 78-79.

[116/] *See, e.g.*, AT&T Post-Hearing Initial Br. at 31-32.

[117/] AT&T Ex. A (Recurring Panel Direct) at 67.

lower value made sense, AT&T contended, because in AT&T's (exaggerated) view, "[i]nstallation of plug-in equipment is a simple matter of snapping the plug-in card into the appropriate slot."[118/] AT&T also proposed a significantly reduced EF&I factor for hardwired equipment, but presented *no* evidence in support of that reduced factor.

AT&T's position entirely misrepresents the plug-in installation costs reflected in Verizon DC's "historical data." The database used by Verizon DC to record the accounting data used for its EF&I factors—the PICS/DCPR system—contains a hardwired account and a plug-in account. However, for various reasons, the database assigns virtually *all* costs of engineering, installation or use of minor materials associated with the installation of plug-in equipment *or* hardwired equipment to the hardwired account.[119/] The only EF&I costs recorded in the plug-in account are the associated taxes.[120/] Thus, the blended hardwired equipment/plug-in EF&I factor proposed by Verizon DC appropriately represents the average costs of installing both types of equipment and produces reasonable, forward-looking costs when applied.[121/] By contrast, the 1.2% plug-in-only figure to which AT&T points reflects nothing more than taxes**,** and clearly is not an appropriate or sufficient EF&I factor for plug-in equipment.[122/]

It is clear that *if* two separate factors were to be adopted, *both* Verizon DC *and* AT&T advocated a hardwired equipment factor *higher*, not lower, than the plug-in equipment factor. As noted above, AT&T specifically argued that plug-in installation was less costly and thus the

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[118/] *Id*. at 66.

[119/] VZ-DC Ex. 2A (Recurring Panel Reb.) at 44.

[120/] *Id*.

[121/] This factor was Verizon DC's proposal for a combined plug-in/hardwired EF&I factor, and thus is an *understatement* of a factor designed to capture only the more expensive hardwired-only installation costs.

[122/] *Id*.

plug-in factor should be lower than the hardwired equipment factor; similarly, Verizon DC argued that if separate plug-in and hardwired EF&I factors were adopted, its hardwired-equipment-only factor would necessarily be higher than the average, blended plug-in/hardwire factor, because the latter reflects the lower costs associated with plug-in equipment.[123/] The Commission's decision to adopt a "loop" EF&I of 1.2% and plug-in EF&I of 20% thus did not accord even with what AT&T had proposed. Verizon DC accordingly assumed that the Commission's Order contained a simple misstatement. AT&T, however, interpreted the Commission's directions concerning the sensitivity run as requiring a 1.2% EF&I for hardwired equipment, and 20% for the plug-in equipment. Although this result clearly is nonsensical and bears no relationship to *any* proposal or evidence on the record, the Opinion and Order accepted the EF&I factors in AT&T's runs.[124/]

It is unclear on what basis the Commission made this determination. The Commission generally suggested that it was rejecting Verizon DC's EF&I factors because it believed "they are not TELRIC-compliant or forward-looking" and "are inextricably tied to Verizon DC's previous investments in older technology."[125/] This is not the case: Verizon DC's EF&I factors reflect the most recent available installation cost data, and there is no reason to think installation costs will drop dramatically in the near future. Moreover, Verizon DC's EF&I factors are the

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[123/] *Id*. at 45.

[124/] Opinion and Order ¶ 241. The distorted EF&I factors adopted in the Opinion and Order are even less defensible in light of the Commission's approval of a 100% fill factor for fiber feeder. In a network with 100% fill for fiber feeder, Verizon DC would have to engage in frequent (and inefficient) installations of fiber to account for network outages, growth, and the like. It thus would incur significant installation costs. But because the Commission's ordered 1.2% EF&I for all loop facilities would virtually eliminate Verizon DC's recovery of the installation costs associated with placing new fiber facilities, Verizon DC would be hindered from recovering those costs even while the network assumption is consistent with an *increase* in the occurrence of such costs.

[125/] *Id*.

only ones on the record that are based on any real world evidence, in contrast to AT&T's completely fictional ones.[126/] But even if it *were* the case that Verizon DC's EF&I factors had to be reduced to be more forward-looking (which it is not), that still would *not* support the ultimate decision that the Commission appears to have made concerning the loop EF&I. The Commission's analysis arguably might support *reducing* Verizon DC's EF&I factors, but it *cannot* support distorting the factors to produce a *higher* plug-in factor than the factor for hardwired equipment. For these reasons the Commission should adopt Verizon DC's proposed EF&I factor for both hardwired and plug-in DLC equipment. At a minimum, the Commission must reconsider its decision and at least raise the "loop" EF&I factor to the 20% level proposed by AT&T, since there is not adequate evidence to support any lower EF&I factor.

2. The Commission Should Reconsider Its Decision To Assume Additional Levels of Structure Sharing in Verizon DC's Cost Model.

It is critical that the Commission reconsider its decision to assume 55% sharing of all structure types, particularly trenches and conduit in new construction. To begin with, that decision was based at least in part on the incorrect assumption that Verizon DC assumed no sharing in its own studies. This simply is not the case. And more fundamentally, the Commission should reconsider its overall structure sharing analysis in light of the real-world evidence that, in the District of Columbia, as time passes, there are *fewer*, not *more*, structure sharing opportunities. Thus, the forward-looking principles that must guide the Commission's decision in this proceeding mandate adopting Verizon DC's assumptions concerning sharing of pole, trench, and conduit investment.

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126 *See* VZ-DC Ex. D (Recurring Panel Direct) at 29; VZ-DC Ex. 2D (Recurring Panel Reb.) at 41-42.

First, the Commission based its decision concerning structure sharing on the incorrect conclusion that "Verizon DC does not recognize structure sharing in its cost estimates."[127/] This conclusion is simply erroneous. In fact, Verizon DC did account for sharing of all structure types in its cost studies. For aerial cable, Verizon DC accounts for pole sharing through an explicit sharing input (set at 50%) to reflect expected, forward-looking sharing opportunities.[128/] Even AT&T acknowledged that Verizon DC's cost studies account for sharing of poles,[129/] and AT&T did not present *any* testimony in support of a different value for this input. At a minimum, then, the adjustment ordered by the Commission should *exclude* pole sharing, because all of the evidence on the record supports Verizon DC's 50% pole sharing factor, not the 55% adopted by the Commission.

Similarly, because Verizon DC's cost studies account for trench and conduit sharing arrangements, the Commission's structure sharing adjustment for these investments also is unnecessary and should be reconsidered. There are two types of trench and conduit sharing. In the first type of arrangement, Verizon DC and another carrier share the costs of a trench so that each can install its own facilities (which may be either buried cable or conduit). Verizon DC's studies reflect such sharing by including in the investment level *only* the portion of the trenching costs that Verizon DC would bear.[130/] Thus, to the extent that Verizon DC has been able to identify other carriers in the District of Columbia with whom Verizon DC can share trenching costs, Verizon DC's buried cable and conduit investment inputs *already* account for the ability to

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[127/] Opinion and Order ¶ 245.

[128/] Verizon DC's pole sharing factor can be found at pages 2-3 of Section 3-Study Inputs, Subsection 3.2-Study Factor, of Verizon DC's cost study documentation.

[129/] AT&T Ex. A (Recurring Panel Direct) at 67.

[130/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 120.

share structure costs with such parties in the District of Columbia. The Commission's adjustment is therefore unnecessary or, at the very least, overstated, as it fails to account for the amount of sharing already reflected in Verizon DC's studies.

The same is true with respect to the second type of sharing, which involves leasing one of Verizon DC's already-installed ducts to another company. Verizon DC's cost studies account for this type of structure sharing in two ways. First, Verizon DC treats those leased ducts as occupied when determining conduit utilization, thus ensuring that application of the conduit utilization factor does *not* recover the costs of ducts that have been leased to other companies. Second, Verizon DC explicitly *subtracts* conduit rental revenues when developing its cost factors to ensure that Verizon DC does *not* double-recover the costs that are recovered through those conduit leasing revenues.[131/] Accordingly, Verizon DC's studies already reflect a lower level of investment and expenses as a result of structure sharing, making the Commission's additional adjustment unnecessary. In sum, to the extent the Commission concluded that a structure sharing adjustment was necessary because "Verizon DC does not recognize structure sharing in its cost estimates,"[132/] this is a misconception based, in part, on AT&T's misrepresentation of Verizon DC's cost studies. Thus, the Commission should take this opportunity to revisit and amend its decision.

More fundamentally, the Commission should accept the levels of sharing in Verizon DC's studies, *not* some entirely hypothetical level of sharing proposed by AT&T, or the structure sharing values from the FCC's Synthesis Model. The levels of structure sharing reflected in

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131/ VZ-DC Ex. D (Recurring Panel Direct) at 43. Moreover, Verizon DC's total conduit rental revenues are minimal and come nowhere close to compensating Verizon DC for 55% of its conduit investment.

132/ Opinion and Order ¶ 245.

Verizon DC's studies are jurisdiction-specific and reflect the opportunities that have been, and on a forward-looking basis are likely to be, available to carriers in the *District*. When the FCC adopted structure sharing values for its universal service cost model, it specifically cautioned parties against using its nationwide inputs for purposes other than universal service support.[133/] The FCC has repeated its warnings when reviewing § 271 applications, observing that it had not considered whether the USF inputs "would be appropriate for any other purpose . . . such as determining prices for unbundled network elements."[134/] This is particularly true where jurisdiction-specific evidence demonstrates that different inputs are appropriate.[135/]

As Verizon DC's witnesses explained, despite "Verizon DC's extensive experience installing conduit in the District of Columbia," Verizon DC has found "only limited opportunities to share trenching costs with other utilities such as cable and power providers."[136/] This is not surprising in an area as heavily developed as the District of Columbia, because most other carriers and utilities already have installed their facilities and have no reason to share another carrier's costs of installing new facilities.

Indeed, because of this, the Commission's decision to require even more sharing than Verizon DC already reflects in its studies conflicts with the forward-looking principles that have guided the Commission's decision-making in this proceeding. Over time, as utilities and carriers develop their own networks, they have less and less of a need for extensive structure sharing. Their network facilities already are installed, except in limited "new build" areas. For the

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133/ *USF Tenth Report and Order* at 20172 ¶¶ 31-32.

134/ *Georgia/Louisiana § 271 Order* at 9161 ¶ 253.

135/ *Id*. at 9056 ¶ 74 (approving the use of state-specific drop lengths in a UNE cost study instead of the national average drop length used in the USF cost model).

136/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 119.

Commission to assume an extensive level of expected *future* structure sharing thus requires the *backward-looking* assumption that these other carriers and utilities have lurched back in time, to a stage when their networks were unbuilt and they thus might have had a need to share structure. If the Commission consistently applies *forward-looking* principles, as it is required to do under TELRIC, it clearly would have to recognize that, in today's world and looking toward the future, structure sharing opportunities are *diminishing*, not increasing. Verizon DC's studies do not assume a reduction in structure sharing opportunities, but instead conservatively assume that structure sharing opportunities will remain at today's levels. Verizon DC's structure sharing assumptions thus are the only ones that are consistent with the FCC's and the Commission's forward-looking approach. The Commission should accordingly reconsider and amend its decision, which apparently failed to take these factors into account.

Finally, reconsideration is necessary because the assumption of *more* structure sharing would require an upward adjustment to the shared costs of installing facilities, which the Commission has failed to adopt. In a densely populated area such as the District, Verizon DC's witnesses have explained that, "even where . . . sharing opportunities exist, they do not always provide significant cost savings."[137/] Verizon DC provided unrebutted evidence concerning one such recent experience—the large-scale, multiple-utility conduit installation project in Georgetown. Verizon DC's experience with that project demonstrates that the added project management fees and other coordination costs associated with multiple-utility projects in the District of Columbia can offset any savings associated with sharing trenches.[138/] Ultimately, Verizon DC's conduit installation costs per foot in that project were similar to, and in some cases

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[137/] *Id*.

[138/] *Id*. at 119-20.

higher than, Verizon DC's costs in other projects where Verizon DC bore all of the costs.[139] Thus, if the Commission assumes that structure sharing somehow will significantly *increase* on a forward-looking basis, the Commission must, given the unrebutted evidence on the record, adjust and increase forward-looking installation costs to account for the added *costs*, and not just the benefits, of sharing. Any other result would be internally inconsistent and would arbitrarily and unlawfully drive down rates.

Accordingly, the Commission should reconsider its decision and either eliminate any adjustments to the level of structure sharing reflected in Verizon DC's cost study—which would be the proper outcome, given that Verizon DC already has accounted for forward-looking levels of sharing—*or* increase Verizon DC's forward-looking investments to account for the increased costs of sharing demonstrated by Verizon DC's recent experience.

3. The Commission Should Reconsider Its Decision to Adopt AT&T's Proposed Cable Sizing Adjustment.

Verizon DC seeks reconsideration of the Commission's adoption of AT&T's proposed adjustment to account for cable sizes in Verizon DC's loop cost study. In the Opinion and Order, the Commission adopts, without explanation, "AT&T's adjustment for cable and fill."[140] Although the Commission did not explain its reasons for adopting this adjustment, Verizon DC believes that it results from a misconception of the manner in which cable sizing is addressed in Verizon DC's studies—a misconception that is itself based on AT&T's misrepresentation of those studies and of AT&T's proposed adjustment. As explained below, Verizon DC's cable sizing algorithms do not require further adjustment.

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[139] *Id.*

[140] Opinion and Order ¶ 255.

Verizon DC's witnesses have explained that Verizon DC's loop cost model uses two separate methods for determining copper cable size, and both result in *oversizing* cable and thus *reducing* per-unit cable costs. For copper *feeder* cable, Verizon DC selects a forward-looking cable size for each route based on the typical copper feeder cable size identified in Verizon DC's existing network for that area.[141/] Verizon DC then uses the *per pair* investment corresponding to that size cable to develop costs for the feeder portion of the loop. Of course, the existing network uses far more copper cable (nearly 100% copper at the time of the engineering survey) than a forward-looking network would use (approximately 42% copper based on the Opinion and Order). As a result, the copper feeder cables in the existing network are considerably larger than the copper feeder cables in the forward-looking network would be, and these larger cables have *lower* costs per pair than the smaller cables that would be used in a forward-looking network with significantly less copper feeder.[142/] Thus, by using the existing feeder cable sizes to estimate costs in the forward-looking network, Verizon DC *overstates* forward-looking feeder cable sizes, and produces conservatively low costs for a forward-looking cost study. Because Verizon DC's approach clearly works to AT&T's benefit, the Commission should adopt Verizon DC's approach to sizing copper feeder cable without AT&T's proposed adjustment.

As Verizon DC explained in its written testimony, AT&T's criticism of Verizon DC's cable sizing methodology has nothing at all to do with Verizon DC's copper feeder cable sizing method. Specifically, AT&T claimed, "[b]y developing the investment cost per cable based on the number of working lines and then adjusting the cost upward by a utilization factor, Verizon's methodology fails to reflect that the average cost per pair of metallic cable declines as cable sizes

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[141/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 78.

[142/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 78-79.

increase."[143/] But Verizon DC's cost model does *not* use the number of working lines to determine copper *feeder* cable size at all. Verizon DC's cost model simply takes the feeder cable sizes from the existing network, which are considerably larger, and thus produce *lower* prices per pair, than the cable sizes that would be used in a forward-looking network. AT&T's criticism of Verizon DC's copper cable sizing algorithm is thus *entirely* unrelated to copper feeder cable, and the Commission erred when it concluded that AT&T's argument somehow required an adjustment to Verizon DC's copper feeder cable sizes. Accordingly, the Commission should reconsider its conclusion on this point and, at a minimum, amend its Opinion and Order to make clear that the adjustment it ordered does *not* apply to copper feeder cable.

There also was no basis for the Commission to reject Verizon DC's distribution cable sizing methodology. That methodology similarly produces conservatively large cable sizes, and thus conservatively low costs. Specifically, for distribution cable, Verizon DC selects a cable size for each distribution area based on the average number of working lines per Distribution Area ("DA").[144/] AT&T correctly points out that this cable size is smaller than the *total* number of distribution pairs that would be installed in a DA once spare capacity is accounted for (through utilization factors),[145/] and this is for good reason. As Verizon DC explained in its rebuttal testimony, "the lines in a DA are rarely all grouped together such that they can be served by one large cable."[146/] The customers in a DA typically are not all located in one direction down

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143/ AT&T Ex. A (Recurring Panel Direct) at 32.

144/ Verizon DC uses the total number of working lines in each ultimate allocation area (UAA), and then divides that number by the number of DAs within that UAA. The result is an average number of working lines per DA for each UAA. VZ-DC Ex. 2D (Recurring Panel Reb.) at 79.

145/ AT&T Ex. A (Recurring Panel Direct) at 32-33.

146/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 79-80.

the same street, but are spread around in different directions from the Feeder Distribution Interface ("FDI"). Several cables must therefore emerge from the FDI in order to serve all the customers in that DA. Thus, even in AT&T's example of a wire center with 300 working lines and a total of 600 distribution pairs (assuming 50% utilization),[147/] a real network would serve those customers using at least two cables (one cable for each direction in which customers are located). If just two cables were used, the cables would be the same size as Verizon DC's assumption (300 pairs). If three or four cables were used to serve those customers, each cable would be *smaller* than the 300-pair cable size assumed by Verizon DC, and the cost per pair would accordingly be *higher* than Verizon DC assumes. Indeed, in a real network, not only are there likely to be more than two cables emerging from the FDI, but each cable is tapered to progressively smaller cables as it extends out into a DA. Thus, the average cable used throughout the DA would be even *smaller* than the cables that Verizon DC assumes. Thus, Verizon DC's distribution cable sizing methodology produces conservatively large cable sizes, and correspondingly low per-unit cable costs—and accordingly should not be adjusted.

The Commission's decision to adopt AT&T's proposed "fix" is therefore unnecessary. In addition, it also appears to be based on a misunderstanding of AT&T's adjustment. Even if the Commission were to accept (erroneously) AT&T's criticism of Verizon DC's cable sizing methodology, and thus accept AT&T's *rationale* for "fixing" Verizon DC's cable sizing, this would *not* support the actual "fix" that AT&T proposes (and that the Commission has adopted)

147/ AT&T Ex. A (Recurring Panel Direct) at 32.

since this "fix" is both unrelated to the alleged "problem" and produces a patently unlawful result.[148/]

Finally, AT&T's "fix" improperly removes the application of a fill factor from Verizon DC's studies. AT&T produces its artificial costs by multiplying the "constant portion" of the unit cable costs by the distribution fill factor. When Verizon DC's cost model then *divides* the reduced unit cable costs by the utilization factor to identify the costs of spare capacity, the result is simply a return to the original "constant portion" of the unit cable costs. Thus, in effect, AT&T's "fix" cancels out the effect of the utilization factor altogether with respect to those costs. But Verizon DC has the right to recover the forward-looking spare capacity costs that the utilization factor is intended to recover. AT&T's fix is therefore contrary to the FCC's TELRIC pricing methodology.[149/]

[148/] AT&T's rationale for its proposed adjustment is that Verizon DC's cost model overstates unit costs by using smaller cable sizes to serve demand—using, for example, the unit cost for a 300-pair cable when a 600-pair cable would be more appropriate. As explained above, Verizon DC in fact selects the unit costs of *larger* cables than actually would be needed in a forward-looking network, and thus there is no merit to AT&T's complaint about overstated costs. Nevertheless, even if the Commission were to accept AT&T's argument that Verizon DC's rates should be based on the costs of even larger cable sizes than those in Verizon DC's studies—in the above example, the cost of the 600-pair cable rather than the 300-pair cable—the AT&T "fix" the Commission adopted does not produce that effect. In other words, AT&T's fix does not ultimately replace the 300-pair cable in the study with a 600-pair cable (and substitute that lower per unit cost of the larger cable). Rather, AT&T's "fix" engages in the following strained approach: AT&T takes the cable unit costs of the cable sizes used in Verizon DC's studies—in this example, the cost of the 300-pair cable—and multiplies a so-called "constant portion" (i.e., the portion that does not vary with size) of those costs by the distribution fill factor. This produces artificially lower costs without actually changing the cable size assumed in the model and, more fundamentally, there is no evidence whatsoever that this produces costs that in *any* way mirror the unit costs of a 600-pair cable. If the Commission's goal were in fact to reflect the costs of a larger cable size, it might have made sense to actually use the record evidence concerning the costs of such cables; but the Commission's rationale does *not* support some arbitrary reduction in unit costs that AT&T has *not* shown bears *any* relationship to the lower cable unit costs it advocates.

[149/] As the FCC has explained, per-unit, forward-looking costs under the TELRIC standard must "be derived from total costs using reasonably accurate 'fill factors'" to account for the forward-looking costs of spare capacity. *Local Competition Order* at 15847 ¶ 682.

Because AT&T's proposed "fix" is completely unrelated to Verizon DC's cable sizing methodology and negates the effect of the fill factor that is required by the TELRIC standard, the Commission should reconsider its decision and reject AT&T's proposed cable sizing adjustment.

4. The Commission Should Reconsider the DLC Inputs It Adopted in Its Opinion and Order.

The Opinion and Order "adopt[s] AT&T's position regarding the deployment of GR-303 at 58.17 percent . . . in a forward-looking, least-cost configured network as TELRIC compliant."[150/] This conclusion is erroneous and should be reconsidered.

First, the Opinion and Order contains several misstatements suggesting that the Commission did not understand the technologies at issue. For example, the Opinion and Order incorrectly concludes that "TR-008 requires UDLC and GR-303 requires" Integrated Digital Loop Carrier ("IDLC").[151/] This is not the case. Both TR-008 *and* GR-303 are *IDLC* technologies. Thus, IDLC can be deployed using either TR-008 *or* GR-303. Both types of IDLC also can be deployed in the same network with UDLC. Indeed, as the Commission recognized, certain services can be provided only through a UDLC interface.[152/] The Commission also incorrectly suggested that "TR-008 . . . concentrates traffic by reserving a feeder circuit for every three distribution circuits."[153/] *Only* GR-303 supports line concentration. To the extent the Commission relied on such misunderstandings of the DLC technology, the Commission's rulings were thus in error.

150/ *Id.* ¶ 265.

151/ *Id.* ¶ 260.

152/ *Id.* ¶ 262.

153/ *Id.* ¶ 259.

Second, the Commission's decision contains at least one fundamental inconsistency, which results in a radical understatement of Verizon DC's forward-looking costs. The Commission recognized that Universal Digital Loop Carrier ("UDLC") is needed in a forward-looking network to provide certain non-switched services, yet then proceeded to order that all fiber-fed Digital Loop Carrier ("DLC") in the forward-looking network should be assumed to be IDLC.[154/] Thus, the Opinion and Order fails to include *any* UDLC in the network, disregarding the "around 12% of Verizon's lines" that the Commission explicitly recognized must be served by UDLC.[155/]

Third, the Commission erred when it relied on GR-303 technology for the unbundling of stand-alone loops even though the evidence in the case demonstrated that this technology has not been deployed by *any* ILEC and is not "currently available." As Verizon DC showed through uncontroverted record evidence, there exists today *no* GR-303 IDLC capability that permits the unbundling of stand-alone loops. Currently the *only* DLC technology capable of provisioning unbundled loops is UDLC technology. Thus, the Commission was required to assume far less IDLC and far more UDLC—and certainly more than zero or even the 12% required for private line services—in order to reflect the forward-looking costs of providing unbundled loops in the District of Columbia.

Fourth and finally, in basing loop costs on non-existent GR-303 loop unbundling capabilities, the Opinion and Order misstates the governing law and accordingly produces a result that fails to comply with essential TELRIC principles. The FCC, the Supreme Court, myriad other state commissions, and even AT&T have recognized that forward-looking network

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154/ Opinion and Order ¶ 265.

155/ Opinion and Order ¶ 263.

costs must be based on technology that is "currently available."[156/] The Commission's disregard for this standard must be reconsidered; rates that fail to comply with what the Supreme Court has recognized is a critical TELRIC safeguard are not lawful and cannot withstand appeal.

a) The Commission Allowed fr *No* UDLC in the Network, Even Though It Acknowledged Some UDLC Is Necessary in the Forward-Looking Network.

Throughout these proceedings, Verizon DC has repeatedly demonstrated that a forward-looking network cannot contain all IDLC technology—that UDLC must be maintained in significant amounts, for unbundling stand-alone loops *and* for providing non-switched services such as dedicated private line services.[157/] While the Commission failed to adequately consider the unbundling limitations of IDLC, the Commission did agree with Verizon that, at least insofar as the need for UDLC to serve dedicated, non-switched services is concerned, "Verizon DC is correct."[158/] In reaching this determination, the Commission approvingly quoted Verizon DC's post-hearing brief, in which Verizon DC explained that "non-switched services . . . can be provisioned *only* over UDLC."[159/] Thus, in determining that Verizon DC was "correct," the Commission necessarily recognized that there must be *some* UDLC in the network.[160/] Indeed,

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156/ *See, e.g.*, 47 C.F.R. § 51.505(b)(1) (TELRIC costs must be "measured based on the use of the most efficient telecommunications technology *currently available*.") (emphasis added); *Verizon Communications*, 122 S. Ct. at 1670 ("Owing to th[e] condition of current availability, the marginal cost of a most-efficient element that an entrant alone has built and uses would not set a new pricing standard until it became available to competitors as an alternative to the incumbent's corresponding element."); AT&T Post-Hearing Initial Br. at 8 (citing 47 C.F.R. § 51.505(b)(1)).

157/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 66; VZ-DC Post-Hearing Initial Br. at 61; *see also Georgia/Louisiana § 271 Order* at 9046 ¶ 50 (upholding use of UDLC in the forward-looking network).

158/ Opinion and Order ¶ 262.

159/ Opinion and Order ¶ 262 (citing VZ-DC Post-Hearing Initial Br. at 60-62).

160/ The Commission suggested that Verizon DC explained that private lines cannot be provided on GR-303 because "GR-303 works on a per call basis," and compared that to how TR-008 works, which the Commission suggested was on a "per circuit basis." *Id.* But this is incorrect and again may have caused the Commission to err in

even AT&T never disputed that the network required some UDLC to serve private line services; its own testimony cites to the fact that "UDLC continued to have advantages over IDLC for some types of services," even after the introduction of IDLC, for "non-switched/non locally switched special services."[161/] Specifically, then, since the Commission determined that 58.17% of Verizon DC's lines would be fiber fed, *some* percentage of those 58.17% fiber-fed lines must contain UDLC rather than IDLC; in particular, since the Commission specifically recognized that at least the 12% of Verizon DC's lines are dedicated, private lines, presumably at *least some* if not all of those lines should have been assumed to be on UDLC.

Yet only two paragraphs after concluding that the need for UDLC meant "the assumption . . . of 100 percent GR-303 technology cannot be adopted by the Commission,"[162/] the Commission inexplicably went on to adopt a network in which 100% of the fiber fed loops are on IDLC and *none* are on UDLC. The Commission's assumption means, among other things, that the network has *no means to provision* private lines services served by loops over three miles in length—because all loops over three miles in length in the forward-looking network will be *fiber fed*, but would not be served by UDLC. Thus, by omitting *any* UDLC from the network, the Commission has made no allowance for Verizon DC to provide such dedicated services. It

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its final analysis. UDLC is necessary for private line services because, while an IDLC interface directly connects a local network switch at a central office to a DLC remote terminal, a private line non-switched service, as its name suggests, does not connect to a switch. That has nothing to do with TR-008, which is an IDLC technology, *not* a UDLC technology. Nor is it correct to say that TR-008 works on a circuit basis while GR-3030 works on a per call basis; but because the difference between the two has no relevance to whether *UDLC* is needed for private line services, we do not discuss it here. This confusion, however, further underlines the need for the Commission to revisit and clarify its understanding of the DLC issues.

[161/] AT&T Ex. A (Recurring Panel Direct) at 23.

[162/] Opinion and Order ¶ 262.

has instead produced a network where 100% of the fiber-fed loops are GR-303 IDLC—exactly the result it acknowledged "cannot be adopted by the Commission."[163/]

The Commission's determination on this point is not only internally inconsistent, but also is fundamentally incompatible with decisions by other state commissions and the FCC. The Pennsylvania commission recently observed that AT&T never even "disputed the fact that UDLC is necessary to provision certain non-switched services that . . . comprise more than 10% of Verizon's services," and that "the use of UDLC is necessary in certain instances."[164/] The New York Commission determined that "rates should be set on a blended basis [using IDLC and UDLC], along the lines proposed by Verizon."[165/] And the FCC, in its Georgia/Louisiana § 271 Order, noted that it was "not persuaded" that "a correct application of TELRIC would require 100% use of [IDLC] technology."[166/]

The Commission's failure to include any UDLC from the network, including the amount that the Commission elsewhere agreed was necessary (a point that even AT&T implicitly conceded) to serve private line services was clearly erroneous. If this error is not remedied, Verizon DC will be severely undercompensated, and UNE rates in the District will be based on a construct that is fundamentally unable to serve the basic needs—including private line services—of the forward-looking network. The Commission accordingly should at minimum assume that 12% of all fiber fed loops are on UDLC.

163/ Opinion and Order ¶ 262.

164/ Pennsylvania Tentative Order at 81.

165/ *New York UNE Order* at 95.

166/ *Georgia/Louisiana § 271 Order* at 9046 ¶ 50.

b) The Commission Incorrectly Based the Rates for Standalone Loops On GR-303 IDLC, Even Though the Necessary Unbundling Capabilities Are Not "Currently Available."

The Commission's decision to base UNE rates on the assumption that all fiber-fed loops would be IDLC (and all of these would be GR-303) is wrong also because it is fundamentally incompatible with essential TELRIC principles. These principles expressly require that UNE rates be based on the costs of technology that is *currently available*. But, as discussed below and as the record demonstrates, the currently available GR-303 IDLC does *not* possess the capabilities necessary to provision unbundled stand-alone loops. Rather, the only DLC technology that can be used to unbundle such loops is UDLC.

The Commission seems to have concluded that its decision to reject TR-008 technology in favor of GR-303 IDLC meant that the Commission had to assume that all fiber fed loops use IDLC.[167/] This misconception flows from the erroneous conclusion, noted above, that "TR-008 requires UDLC and GR-303 requires IDLC."[168/] This is simply not the case. *Both* Verizon DC *and* AT&T noted—the basic technological fact—that TR-008 is an IDLC technology, *not* a UDLC technology.[169/] Thus, in adopting an assumption of 100% GR-303, the Commission was necessarily saying nothing more than that all IDLC in the forward-looking network should be GR-303 IDLC. That does *not* address how much of the fiber fed loops in the network should be IDLC versus UDLC. And as the record clearly demonstrates, even if *all* the IDLC in the network were assumed to use GR-303, there is a critical need for UDLC in the network to provide standalone unbundled loops.

167/ *See* Opinion and Order ¶ 265.

168/ *Id.* ¶ 260.

169/ VZ-DC Post-Hearing Initial Br. n.178; AT&T Ex. A (Recurring Panel Direct) at 25 ("TR-008 integrated designs implement concentration within the switch, between the peripheral and the switching fabric.").

There is no genuine dispute, despite AT&T's efforts to obscure the point, that the GR-303 technology and products that exist today simply do *not* have stand-alone loop unbundling capabilities. Verizon DC's testimony from its engineering experts makes clear that the GR-303 technology available today lacks several fundamental functional capabilities that would be needed to support IDLC unbundling, including, for example, security and error protection.[170/] Furthermore, Telcordia, the organization that sponsors the GR-303 standard, notes on its own website that "new requirements are needed" before "local loop unbundling" can be supported by the GR-303 interface.[171/] And as Alcatel, the leading manufacturer of GR-303 DLC equipment, wrote in a letter that Verizon DC introduced in this proceeding, "significant additional challenges to the industry . . . still must be solved" before GR-303 can be used to unbundle stand-alone loops.[172/] *Even AT&T's own witness admitted* that unbundling using GR-303 "hasn't been done."[173/] Thus, whether or not some future hypothetical generation of GR-303 technology may some day be developed that *does* have such loop unbundling capabilities, the technology and products that exist *today* cannot do so, and accordingly, the *only* way for Verizon DC to provide unbundle stand-alone loops to CLECs is through UDLC technology.

The Commission pointed to Verizon's 1999 guidelines as supposed evidence that "GR-303 and IDLC facilitate the electronic provisioning of unbundled loops."[174/] But the precise

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[170/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 67-68; *see also id*., Att. I (letter from equipment vendor Alcatel noting that before GR-303 can be implemented in a multi-carrier environment, "significant additional challenges . . . still must be solved").

[171/] *Id*., Att. H (Telcordia GR-303 Integrated Access Platforms - 2001 Work Program Information, <http://www.telcordia.com/resources/genericreg/gr303/program.html>).

[172/] *Id*., Att. I (letter from Alcatel).

[173/] Tr. at 355 (Nurse).

[174/] Opinion and Order ¶ 264.

portion of this document quoted by the Commission shows, on its face, that GR-303 in fact *cannot* accomplish such unbundling without "rout[ing] the customer to a universal shelf."[175/] A "universal shelf" is a reference to UDLC (universal digital loop carrier), and the fact that the customer is routed there, as opposed to directly into the switch, demonstrates the limitation of GR-303. The document thus makes clear that the only way GR-303 can be used to unbundle is if it is deployed in *conjunction* with UDLC, not instead of it, and thus shows that UDLC remains critical for unbundling stand-alone loops. The Commission similarly relied on the fact that GR-303 "was available for purchase according to the Telcordia authorization as of three years ago."[176/] However, as noted above, Telcordia itself is of the opinion that the GR-303 standard does *not* support the unbundling of stand-alone loops.

In addition to this fundamental technical error, the Opinion and Order also misstates and misapplies the governing law with respect to this issue. The Commission failed to take into proper account the fact that the TELRIC "forward-looking" methodology is limited to technology that is "currently available." There can be no reasonable dispute on this point. The FCC's rules provide that UNE rates should be based on "the use of the most efficient technology *currently available*."[177/] The Commission was aware of this specific rule, and referenced it in footnote 537 of its Opinion and Order,[178/] although it erred in its application. The U.S. Supreme Court recently pointed specifically to the "currently available" limitation as one of the

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[175/] Verizon 1999 Network Planning Document, at 1 (cited in AT&T Post-Hearing Br. at 28); AT&T Ex. A (Recurring Panel Direct) at 27.

[176/] Opinion and Order ¶ 261.

[177/] 47 C.F.R. § 51.505(b)(1) (emphasis added).

[178/] Verizon DC's post-hearing brief cites 47 C.F.R. § 51.505(a)(1), but that provision notes that TELRIC costs must be set in accordance with 47 C.F.R. § 51.505(b), which in turn contains the "currently available" limitation.

safeguarding principles that made TELRIC reasonable and lawful.[179/] Indeed, contrary to the Commission's suggestion, the Supreme Court not only referenced the "current availability" standard several times, it embraced it, and indeed *relied* on it in upholding TELRIC.[180/]

The Commission thus was incorrect in concluding that Verizon DC was misquoting the Supreme Court or "misattributing" to the Court a statement by the Michigan Public Service Commission.[181/] And the Commission likewise confused Verizon DC's quotation of the FCC's rules, which articulate this critical limitation,[182/] with a citation to the *Local Competition Order*.[183/] The Commission would be fundamentally in error to conclude that it was not bound by the clear "currently available" limitation that is a cornerstone of the TELRIC costing methodology. The law is clear beyond question that this limitation applies, and the facts demonstrate, similarly beyond question, that the technology and products necessary to use GR-303 IDLC for stand-alone loop unbundling are *not* currently available. Thus, the Pennsylvania commission, the New York commission, and even the FCC all have recognized that, in the

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179/ *Verizon Communications*, 122 S. Ct. at 1664.

180/ The Opinion and Order seems to suggest that the Supreme Court referred to the "currently available" limitation only in quoting the Michigan Public Service Commission's order. Opinion and Order ¶ 261 (citing *Verizon Communications*, 122 S. Ct. at 1670 n.22). But it is incumbent on the Commission to revisit the Supreme Court's decision. The Court cites to FCC Rule 51.505(b)(1) several times, noting at one point that it was "[m]ost important of all [that] the FCC decided that the TELRIC 'should be measured based on the use of the most efficient telecommunications technology *currently available* . . . ." *Verizon Communications*, 122 S. Ct. at 1664. Although the Verizon opinion does cite to the Michigan decision, the Court itself rejected an attack on TELRIC by noting that "it bears reminding that the FCC prescribes measurement of the TELRIC 'based on the use of the most efficient telecommunications technology currently available.'" *Id.* at 1670. As the Supreme Court then noted, "[o]wing to that condition of current availability, the marginal cost of a most-efficient element that an entrant alone has build and uses would not set a new pricing standard until it became available to competitors as an alternative to the incumbent's corresponding element." *Id.*

181/ Opinion and Order ¶ 261.

182/ 47 C.F.R. § 51.505(b)(1) (TELRIC costs "should be measured based on the use of the most efficient telecommunications technology *currently available*") (emphasis added).

183/ *See* Opinion and Order ¶ 261.

forward-looking network, inclusion of UDLC may be necessary and is entirely appropriate and consistent with TELRIC principles.[184/]

For these reasons, the Commission should reconsider its decision and adopt Verizon DC's proposed UDLC/IDLC split for the 58.17% of the loops in Verizon DC's forward-looking network that the Commission assumed to be fiber fed. That would result in 7% of the loops being on UDLC and 51.2% on IDLC (or 12% of all the fiber loops being UDLC and 88% IDLC). That decision is entirely in keeping with those of other state commissions and the FCC, which correctly recognized (as the Commission must as well) that DLC inputs in a TELRIC study must reflect the limitations of currently available technology.

c) The Commission Should Reconsider Its Assumption that All IDLC in The Forward-Looking Network Would Utilize the GR-303 Interface.

Even with respect to the IDLC that is appropriately assumed in the forward-looking network, not all of it should be GR-303, and the Commission's assumption to the contrary was incorrect. For various reasons, this assumption affects switching costs more than loop costs. Nevertheless, the assumption of an overly high percentage of GR-303 for the IDLC in the network reduces loop and switching rates with no valid, or TELRIC-compliant, justification. Verizon assumed that its IDLC would be TR-008 in the forward-looking network.[185/] In Verizon's experience, no carrier building out a network today would invest in GR-303 IDLC if it did not have to (and would, for example, use existing TR-008 IDLC instead), because of the anticipated migration to packet-based switching that would require different DLC interfaces.[186/]

184/ *See Pennsylvania Tentative Order* at 81; *New York UNE Order* at 95; *Massachusetts UNE Order* at 148; *Georgia/Louisiana § 271 Order* at 9046 ¶ 50.

185/ VZ-DC Ex. D (Recurring Panel Direct) at 71.

186/ VZ-DC Post-Hearing Initial Br. at 62.

Verizon DC therefore is not deploying *any* GR-303 facilities at this point, despite older network documents that did advocate deployment of GR-303, back when GR-303 was new and packet switching technology had not yet matured. Since GR-303 accordingly represents only an interim technology until packet switching becomes a cost-effective alternative to circuit switching, it is not efficient to deploy GR-303 and then have to replace it. Assuming extensive deployment of GR-303 IDLC is thus inconsistent with TELRIC principles of assuming the deployment of the most economic, efficient, currently available technology.[187/] Accordingly, the Commission should reconsider its decision and assume that all IDLC in the forward-looking network will be deployed using TR-008.

5. The Commission Should Reconsider the Utilization Rates It Adopted in Its Opinion and Order.

In its Opinion and Order, the Commission adopted some of the highest loop utilization rates of any jurisdiction in the entire country—much higher than fill factors that the FCC has endorsed in its review of § 271 applications. It is critical that the Commission reconsider this aspect of its decision, as Verizon DC simply could not operate an efficient, functional, high quality network in the District of Columbia with the extremely high fill rates adopted by the Commission, or the significantly below-cost rates that result from those fills. Indeed, the service quality standards[188/] and carrier of last resort obligations[189/] that the Commission imposes on Verizon DC fundamentally conflict with the Commission's utilization assumptions. As Verizon

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[187/] 47 C.F.R. § 51.505(b)(1).

[188/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 91-92 (citing service quality standards imposed by Commission); VZ-DC Post-Hearing Initial Br. at 77.

[189/] *See* Opinion and Order ¶ 208 ("[A]n ILEC in the District of Columbia must serve the entire (100 percent) market, because it is under a government mandate to do so.").

DC has explained, attempting to apply the fill factors proposed by AT&T would result in a loss of efficiency and a degradation of service.[190/]

Of course, the Commission no doubt does not expect Verizon DC to *actually* operate the network at these high fills; instead, Verizon DC presumably is expected to continue to operate the network as it must to ensure high performance and reliability *but without being allowed to recover the resulting costs*. The result is gross undercompensation that violates the federal 1996 Act and would ultimately prevent Verizon DC from operating its network with anywhere close to the level of efficiency and reliability expected by residents of the District.

In all but one case, the Commission adopted the unrealistically high and entirely hypothetical fill factors proposed by AT&T—fill factors unsupported by factual evidence. The only factual evidence on this topic was offered by Verizon DC, and this evidence shows that the fill factors compatible with a robust, functioning, forward-looking network are those reflected in Verizon DC's studies.

a) The Fill Factors in Verizon DC's Studies Are TELRIC-Compliant.

The Commission appears to have been troubled by the fact that many of the fill factors in Verizon DC's studies are observed fills from the existing network in the District; indeed, the Commission pointed to the fact that Verizon DC's fills are "based on" Verizon DC's existing network in declaring them "not TELRIC-compliant" and adopting AT&T's fills.[191/] But while

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[190/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 90-91; VZ-DC Post-Hearing Initial Br. at 77.

[191/] Opinion and Order ¶ 211.

AT&T repeatedly sought to portray Verizon DC's fills as "embedded,"[192] this is not the case, and this argument is simply a red herring.

The fill factors used in Verizon DC's studies are explicitly designed to capture the utilization levels that Verizon DC would reasonably expect to observe in a robust, functioning, *forward-looking* network.[193] While it is true that Verizon DC determined those fills by looking at its *existing* functioning network, it did not simply take the fills from its existing network *because* they were existing, or "embedded" fills. To the contrary, in many cases Verizon DC made explicit forward-looking adjustments to its existing fill factors before inserting them into its UNE studies; and even where Verizon DC did rely on the factors it observed in its existing network, those factors reflect Verizon DC's effort, operating under a price cap regime, to balance efficient plant utilization with the need to maintain enough spare facilities to satisfy its administrative and operational needs and regulatory obligations. Thus, Verizon DC determined that the levels of fill it observed in its existing network in some cases reflected the optimal balance—one that *should* be preserved in the forward-looking network to achieve the same level of performance and efficiency as District ratepayers (and CLECs) enjoy today.[194] In other cases, as noted, Verizon DC *started* with those fill factors, but adjusted them upwards to produce higher, more conservative levels of fill in its TELRIC studies. Using data from a real network is the only rational means of selecting appropriate fill factors: as Verizon witness Mr. Gansert

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[192] AT&T Post-Hearing Initial Br. at 34.

[193] VZ-DC Post-Hearing Initial Br. at 73-77; VZ-DC Post-Hearing Reply Br. at 33-34.

[194] VZ-DC Ex. 2D (Recurring Panel Reb.) at 92-93; VZ-DC Post-Hearing Initial Br. at 74.

noted at the hearing, fill factors cannot be "picked out of the sky," but rather "should be based on experience or some operational reality."[195/]

Nor does the mere fact that existing data was used as the starting point make Verizon DC's proposed fill factors "not TELRIC-compliant" or not forward-looking. Nothing about the basic operational realities of the telecommunications network as it develops and advances is expected to, or should, affect the amount of spare capacity needed to achieve the desired level of efficiency and performance. In Verizon DC's network today, for example, fiber feeder is deployed, and in Verizon DC's experience, deploying and operating such fiber efficiently demonstrates that a fill of **[BEGIN VERIZON DC PROPRIETARY]** XXX **[END VERIZON DC PROPRIETARY]** is necessary to achieve efficiency while ensuring high performance and meeting customer demand and regulatory obligations. The forward-looking network will have *more* fiber, but the mere fact that it will be deployed in more places in the network would not have any impact on how to install or operate that fiber efficiently. The same is true for copper distribution plant: the type of plant in the forward-looking network will be the same as today's plant. Today's experience operating that plant efficiently is thus uniquely instructive with regard to the fill that tomorrow's efficient operation of that plant will produce in the forward-looking network.[196/] Thus, not surprisingly, the FCC has recognized that existing utilization factors—particularly for those facilities (like copper distribution plant) that no one claims will change

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[195/] Tr. at 270 (Gansert).

[196/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 99-101.

dramatically in the forward-looking network—can form the basis for a TELRIC-compliant cost study.[197/]

Accordingly, while the Commission may have been concerned that Verizon DC's fill factors were too "embedded" to be consistent with a TELRIC-study, this should not be a concern. To the contrary, Verizon DC's fills are the fills that are most likely to produce a forward-looking network that is at least as functional and efficient as today's network, if not more so. And those fills (and that analysis) are entirely supported by the opinion of Verizon's extensively experienced engineers and by a real world functional network. AT&T's proposed fill rates, on the other hand, lack any factual basis, and in fact AT&T was forced to admit that it could point to *no* local exchange network that operates with the average utilization factors that it proposed (and that, in all but one case, the Commission adopted).[198/] That is unsurprising, because adopting AT&T's unrealistically low factors simply to reduce costs would be incompatible with the real world operational needs that the Commission must consider in order to produce meaningful and lawful UNE rates. As the Commission itself noted, "an ILEC in the District of Columbia must serve the entire (100%) market, because it is under a government mandate to do so,"[199/] and "[a] rational entrant would leave spare capacity for unanticipated growth and other uncertainties."[200/]

Given the Commission's own conclusions, the unrebutted factual evidence offered by Verizon DC, and AT&T's admission that it could not point to a single network that operated

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197/ *See Vermont § 271 Order* at 12290 ¶ 36 (approving Vermont commission's adoption of Verizon's switching-related fill factors).

198/ VZ-DC Post-Hearing Reply Br. at 34 (citing discovery responses).

199/ Opinion and Order ¶ 208.

200/ *Id*. ¶ 209.

with fill factors AT&T proposed, it was clear error for the Commission to rely almost exclusively on AT&T's fill factors.

b) The Specific Fills Verizon DC Proposed Are Appropriate and Forward-Looking.

The Commission should not have adopted *any* of the AT&T utilization inputs. As discussed below, the Commission's ordered fill factors are likely to have significant negative impact on network performance, and many are inconsistent with the utilization rates ordered in other jurisdictions.

(1) Distribution Utilization

The Commission-ordered 60% distribution fill factor would cause serious operational problems in any real world network and jeopardize Verizon DC's ability to provide service to District ratepayers and CLECs. It would cause a shortage of distribution facilities along various cable routes at different times and, in turn, produce otherwise avoidable delays in provisioning new service, providing additional lines to existing customers, and restoring existing service in the event of a service outage or emergency. The high utilization rate adopted by the Commission also fails to account for such critical network planning concerns as administrative needs, customer churn, and breakage.[201/]

Moreover, as Verizon DC witness Mr. Gansert observed at the hearing, trying to impose a 60% fill factor on a real, operational network would lead to a significant *increase* in certain network costs. To adopt only the higher fill level without adopting the increased expenses that would result from such higher fill would produce an illogical, inconsistent result that is not compatible with an orderly, principled, TELRIC model. As Mr. Gansert explained:

[201/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 90-91, 101-02.

> [E]ven if one wanted to adopt a 60 percent utilization rate, you could not just simply assume that the effect on cost is to now use a 60 percent utilization rate against the same investment that was sized for the 40 percent utilization rate. You would have to first downsize the investment, and then apply the utilization factor. You would also have to investigate how that affected operating cost, because clearly it is much [more] costly to operate the network that is 60 percent utilized than the one that is 40 percent utilized. So even if one accepts changes in utilization rates, you can't independently vary that number in the distribution without also adjusting for the investment change.[202/]

Yet the Commission, in focusing solely on the utilization adjustment at AT&T's invitation, failed to consider such increased costs. And a failure to do so not *only* produces inconsistent results, as noted above—it also produces even *more* underrecovery for Verizon DC, thus further jeopardizing network performance in the District.

Not surprisingly, the 60% fill factor ordered by the Commission is higher than *any* fill factor approved by the FCC in the § 271 context, where the FCC has found utilization rates as low as 40% for distribution to be TELRIC-compliant.[203/] It is also is substantially higher than those reached in recent UNE proceedings in New York, New Jersey, Massachusetts, and Pennsylvania, where the respective state commissions ordered distribution fill factors of between 48% and 53%.[204/]

[202/] Tr. at 275-76 (Gansert).

[203/] *See, e.g.*, *Massachusetts § 271 Order* at 9007 ¶ 39; *New Jersey § 271 Order* at 12290 ¶ 37& n.94 (noting approval of 40% distribution fill factor in *Massachusetts § 271 Order*); *Georgia/Louisiana § 271 Order* at 9053-54 ¶¶ 66-69 (approving 41% distribution fill factor).

[204/] *Pennsylvania Tentative Order* at 91 (adopting 50% distribution fill factor); *Massachusetts UNE Order* at 172 (adopting 48% distribution fill factor); Decision and Order, *In the Matter of the Board's Review of Unbundled Network Element Rates, Terms and Conditions of Bell Atlantic-New Jersey, Inc.*, Docket No. TO-00060356, NJ B.P.U., 84-85 (Mar. 6, 2002) ("*New Jersey UNE Order*") (adopting 53% distribution fill factor); *New York UNE Order* at 101 (adopting 50% distribution fill factor).

For these reasons, the Commission should replace its ordered 60% fill factor with the TELRIC-compliant **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** figure proposed by Verizon DC, which is based on real-world data that demonstrates that this level of fill is consistent with robust operations and efficient cost control, and is forward-looking.

(2) Fiber Feeder

The Commission's adoption of a 100% fiber feeder fill, in place of Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fill factor, is particularly insupportable in light of the evidence in the record. The Commission seemed to recognize that it is necessary to "leave spare capacity for unanticipated growth and other uncertainties."[205/] Nonetheless, the Commission inconsistently adopted a 100% fiber feeder fill. And it is of course impossible to operate a network with absolutely no margin of spare capacity. As Verizon DC noted in the record, spare fiber facilities are needed in case of ribbon failures, to stage the necessary splicing for movements and rearrangements of fiber plant, and to account for breakage caused by the disparity between the size of the typical manufactured fiber sheath (12 strands) and the number of strands typically needed from that sheath (4 strands).[206/] A fiber feeder fill that is too high will result in insufficient capacity and thus inefficient and delayed service. As Commissioner Rachal notes in his dissent, "[t]he Commission has chosen to adopt a[n] unreasonable and unrealistic 100% fiber feeder fill factor that if employed by Verizon, would result in 'zero spare capacity' in the

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[205/] Opinion and Order ¶ 209.

[206/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 109.

network and would require it to 'lay new fiber' to meet any new request for services provided over wire."[207/]

The Commission apparently believed that its 100% fiber feeder fill was justified by the concern about the alleged "double recovery" of dark fiber, argued by AT&T. AT&T alleged (and the Commission accepted) that by charging for dark fiber and setting the fiber feeder fill factor at less than 100%, Verizon DC effectively reaps a "double recovery" for its dark fiber.[208/] But this allegation is wrong. Verizon DC already excludes leased dark fiber from the fiber it considers "spare," and thus ensures that it does *not* double recover the costs of such fiber both through dark fiber UNE rates and through the fiber utilization factor. As the Massachusetts commission recently recognized in rejecting AT&T's proposed 100% fiber fill, "there is no double recovery when Verizon leases dark fiber" because it is already accounted for in its loop-related utilization rates.[209/] By adjusting the fiber fill up to 100%, the Commission has unwittingly produced a windfall to CLECs who now *underpay* for fiber that Verizon DC nonetheless must maintain; alternatively, if the network were somehow reconfigured to allow for *no* spare fiber, there would be no more dark fiber, as Verizon DC would require every fiber to be lit in order to provide service. That result clearly makes no sense and would serve neither CLECs' nor Verizon DC's needs in the long run. The Commission should accordingly adopt Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fiber fill factor.

[207/] Opinion and Order ¶ 3, Dissent.

[208/] *Id.* ¶ 348.

[209/] *Massachusetts UNE Order* at 211.

(3) Copper Feeder

The Commission adopted AT&T's proposed 80% copper feeder fill factor in place of Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fill. The Commission did not explain precisely why it was adopting AT&T's figure, but whatever the reason, the issue deserves reconsideration by the Commission. It is a significant cost driver and the record supports a fill factor much lower than that adopted in the Opinion and Order. As Verizon DC noted in its testimony, an 80% utilization rate for copper feeder fails to provide sufficient spare capacity to accommodate administrative and maintenance tasks, or even near-term demand growth, in an efficient manner.[210/] Verizon DC's operating experience has established the need for spare capacity for these purposes at 10% or 15% of total installed capacity, depending on whether the feeder route is interfaced (i.e., whether there is an SAI or FDI on the route). Without this margin of spare capacity, it would be far more difficult and significantly more costly to maintain continuous, quality service. Additionally, breakage of copper cables and customer churn further limit the feeder utilization rate that a forward-looking network can achieve in practice.[211/] Not surprisingly, AT&T was unable to identify any local exchange carrier, including itself, that has achieved the 80% copper feeder utilization rate it proposes.[212/] Thus, AT&T's 80% fill is simply a made-up, arbitrary number that is designed to reduce short term, immediate CLEC costs, without regard to true costs or network effect. It makes no sense to adopt that number when the record contains real-world data demonstrating that an efficient network needs significantly more spare to function as required. This is

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210/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 104.

211/ *Id*. at 105-06.

212/ AT&T Response to Verizon DC Data Request No. 1, Question 119 (Att. B).

especially the case given that the fill factor proposed by Verizon DC was in fact *higher* than the actual fill Verizon DC observed in the real-world network: although actual fill has been **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**, Verizon DC adjusted that figure upward for this proceeding to **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**, based on a multi-jurisdictional average. The fill proposed by Verizon DC is thus not only based on real world data but is aggressively high for Washington, D.C.

For all of these reasons, AT&T's proposed 80% copper feeder fill factor (which the Commission adopted unquestioningly) cannot be incorporated in a cost study that models a functioning, forward-looking network. The Commission accordingly should adopt Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fill factor.

(4) RT Plug-In Utilization

The Commission, in accepting AT&T's 90% fill factor for RT plug-ins over Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fill factor, again provided no explanation for its decision. But as Verizon DC explained to the Commission, a 90% fill factor for plug-ins would not support real-world, operational loop plant. An efficient network design must provide sufficient spare capacity to accommodate administrative and maintenance needs, as well as anticipated growth.[213/] In the case of service plug-ins, efficient design calls for maintaining a 10% margin of spare capacity to accommodate administration, maintenance, and related functions.[214/] And plug-in utilization is

[213/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 112.

further reduced by customer churn, since typically it is more efficient to leave plug-ins assigned to a particular customer premises for some period of time after a customer vacates the premises, because the service likely will be reconnected as soon as a new tenant arrives.[215/]

Here again, AT&T's number has no legitimate basis of support, relying instead entirely on AT&T's false assertion that it is inexpensive to install more plug-ins as needed, so that installing spare at one time is unnecessary and inefficient.[216/] This assertion is erroneous, however, because it refuses to recognize that spare serves critical purposes separate and apart from growth, as explained above. As with other utilization rates, AT&T has not identified any local exchange carriers able to achieve the 90% fill factor for RT plug-ins that AT&T proposes, nor has it suggested that the 90% fill it advances was based on *any* real-world data at all.[217/] In contrast, Verizon DC's figure is a forward-looking fill factor that looks to a robust, efficient operational network to find the optimal fill for plug-ins today, but then explicitly forward-adjusts that fill to reflect expected developments that, in this particular instance, likely would increase fill in the forward-looking network.[218/] Specifically, though actual observed fill in the District has been **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**, Verizon DC adjusted that upward to account for efficiencies that Verizon

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[214/] *Id*., Att. L (Bell Atlantic Engineering Guidelines) at 9 (referring to 90% critical exhaust for interfaced feeder facilities).

[215/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 112.

[216/] AT&T Ex. A (Recurring Panel Direct) at 56.

[217/] AT&T Response to Verizon DC Data Request No. 1, Question 121 (Att. B). The New York commission, for instance, adopted an 88% fill factor for RT plug-ins. *New York UNE Order* at 102.

[218/] VZ-DC Post-Hearing Initial Br. at 74 n.220.

DC's engineers expected would achieve in the forward-looking network,[219/] and proposed a factor of **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** for use in the TELRIC studies in this case. For these reasons, the Commission should adopt Verizon DC's **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** fill factor for RT plug-ins.

(5) RT Common Electronics

The Commission accepted AT&T's proposal to set the common electronics fill factor at 80%, rather than the **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** proposed by Verizon DC. But as with the adopted utilization factor for RT plug-ins, the proposed 80% utilization factor fails to reflect administrative spare requirements, demand growth during the relief planning period, and the effects of churn and breakage. Industry operating experience has established that DLC systems operate most efficiently with an administrative spare margin of 10% of installed RT common electronics capacity, and efficient engineering practices further call for incorporating enough spare in the network for three years of line growth.[220/] Thus, assuming annual line growth of 3%, the RT common electronics utilization should be 81% at the time of installation or augmentation of the RT. Add to this the significant effects of customer churn and breakage,[221/] and the evidence points to the fact that a utilization factor no higher than the **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** proposed by Verizon DC is most appropriate for a forward-looking network.

219/ VZ-DC Ex. D (Recurring Panel Direct) at 79-80.

220/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 113-14.

221/ *Id*. at 114.

In fact, Verizon DC's proposed factor is aggressively forward-looking. Although actual fill in the District is **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**, Verizon DC's proposed forward-looking factor for its studies is **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]**. In contrast, AT&T simply insists, again without any basis, that 80% should be enough, yet AT&T does not even suggest that this absurdly high fill level has ever been achieved in its own or any other carrier's network. Again, the Commission has thus chosen an entirely hypothetical number over the only data in the record, producing a result that simply makes no sense. The Commission should accordingly modify the Opinion and Order and adopt Verizon DC's proposed RT common electronics fill factor.

(6) Conduit Utilization

Unlike the other utilization rates, the Commission properly rejected AT&T's proposed 100% fill factor for conduit (with an illusory $0.72 per-foot add-on for the materials-only price of an additional duct), noting correctly that "[a] rational entrant would leave spare capacity for unanticipated growth and other uncertainties."[222/] The 75% conduit fill factor it adopted, however, is still too high, as the record evidence demonstrates. Verizon DC's proposed **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** utilization rate is an appropriate, forward-looking factor that reflects Verizon DC's experience with the realities of installing conduit in an efficient manner and addressing underground conduit needs in the network in the District over many years.[223/] The Commission's figure does not leave Verizon DC enough spare to address the high costs of digging a trench, which make repeated excavations

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222/ Opinion and Order ¶ 209.

223/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 118.

for maintenance and additional installations of fiber cable prohibitively expensive.[224/] Moreover, municipal regulations in the District place significant restrictions on the timing of street excavations for the placement of new facilities.[225/] And as Verizon DC explained in its testimony, the conduit fill factor cannot account for shared conduit, because real-world experience (including with the current Georgetown Project) demonstrates that the opportunities for sharing are limited, and in any event do not provide significant cost savings.[226/]

For these reasons, the Commission should modify the Opinion and Order to adopt Verizon DC's proposed conduit fill factor.

6. The Commission Should Clarify That It Never Intended To Adopt AT&T's Cable Investment Data In Place of Verizon DC's D.C.-Specific Data, and the Decision Adopting Rates Based On That Data Should Be Reconsidered.

Verizon DC seeks reconsideration of the Commission's possibly inadvertent adoption of AT&T's non-D.C.-specific cable investment data. In AT&T's compliance cost studies, AT&T, without any direction or approval from the Commission, replaced Verizon's D.C.-specific cable and structure investment inputs with substantially lower inputs that AT&T obtained from other jurisdictions or entirely hypothetical cost models. In the Opinion and Order, the Commission determined that it would base loop rates on AT&T's compliance studies, and in so doing, necessarily adopted rates that incorporated AT&T's cable and structure investment inputs. Yet the Commission never discussed or apparently even considered whether there might be any reason to adopt data from other jurisdictions or hypothetical models instead of District-specific

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224/ *Id*. at 117.

225/ *See generally* D.C. Mun. Regs. tit. 24, § 3401 (2002).

226/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 119-20.

cost data. Indeed, it is not clear that the Commission was even aware that AT&T *had* based its compliance runs on such irrelevant and distorted data, or that the Commission's approval of AT&T's compliance studies implicitly adopted that data. In any event, given both the lack of discussion in the Opinion and Order indicating any Commission consideration of this issue, together with the availability of District-specific, forward-looking investment data that is unquestionably the most relevant to determining forward-looking costs for the large majority of cable and structure types in the District, a decision to adopt the AT&T inputs clearly cannot stand.

The dispute at issue between AT&T and Verizon DC concerning cable investment data concerns not how to make the data forward-looking, but *which* data to use as a starting place. Verizon DC's cost studies base the expected, forward-looking investment costs for most cable and structure types on data concerning Verizon DC's recently experienced investments *in the District of Columbia* (including the District-specific values for critical inputs such as placement of cables and conduit systems).[227/] Of course, Verizon DC made forward-looking adjustments to that data, and, where appropriate, averaged its actual investment data over several years to smooth out annual variations in the cost of installing facilities and to more accurately reflect network-wide, forward-looking investment.[228/] But the result clearly represents a realistic estimate of the forward-looking, *District-specific* investment in cable and structure.[229/]

227/ *See generally* AT&T Ex. A (Recurring Panel Direct) at 34-37; VZ-DC Ex. 2D (Recurring Panel Reb.) at 72-84; VZ-DC Post-Hearing Initial Br. at 64-71.

228/ VZ-DC Ex. D (Recurring Panel Direct) at 88-90; VZ-DC Ex. 2D (Recurring Panel Reb.) at 72-84.

229/ Verizon DC made an exception and used Maryland data for buried cable only because, due to the rarity of buried cable in the District, Verizon DC did not have a complete set of District-specific buried cable investment data. This has almost no impact on UNE rates because of the very small amount of buried cable used in D.C. VZ-DC Ex. 2D (Recurring Panel Reb.) at 75.

AT&T, on the other hand, inexplicably contends that, in calculating forward-looking cable and structure investment, it *always* makes more sense to use data from other jurisdictions or hypothetical cost models as a starting point, instead of data from the District of Columbia. Thus, AT&T replaces Verizon DC's District-based data with substantially lower inputs derived from other jurisdictions, such as Maryland and West Virginia, or hypothetical data from the FCC's Synthesis Model, that has no possible connection with Verizon DC's real experience in the District.[230/] AT&T's only apparent explanation for rejecting real District data is a nonsensical argument that the costs Verizon DC has experienced in the District are not appropriate to use as a starting place because they do not reflect economies of scale that are available in larger jurisdictions.[231/] But as Verizon DC explained, this position makes no sense: the costs that have been experienced in the District demonstrate precisely that a carrier serving customers here has economies of scale and faces operating conditions that are very different from a carrier in Maryland, West Virginia, or other Verizon jurisdictions. Simply wishing it were not so does not justify AT&T's effort to substitute costs from another state; nor does it make sense to use the Synthesis Model assumptions in place of actual data, again based simply on the wish that the lower prices were the real ones. Moreover, as noted above, the FCC has repeatedly warned parties *not* to rely on the Synthesis Model inputs for setting UNE rates, particularly where jurisdiction-specific data is available.[232/] This is even more critical given the unique characteristics of the District—such as the need to repave roads and sidewalks after installing

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230/ *See* VZ-DC Post-Hearing Reply Br. at 28-30.

231/ *See* AT&T Ex. D (Recurring Panel Direct) at 35-37. AT&T also wrongly claims that Verizon's VRUC data is *not* based on actual cable installation projects, but then proceeds to propose using Verizon's VRUC data from other jurisdictions. *See id.* at 34-35. Verizon DC therefore assumes that, regardless of AT&T's contentions, AT&T has no objection to using VRUC data.

232/ *See supra* Part III.A.2.

conduit, and to install poles in tight urban areas instead of along open roadways—that make it costly to install cable, poles, and conduit.[233/]

Given that Verizon DC placed District-specific data on the record, and given that the Commission both did not and, with the one exception noted above, could not have determined that it was more sensible to use data from other Verizon jurisdictions, the Commission certainly should not have adopted rates that implicitly required adoption of AT&T's cable and structure investment inputs. Even if the Commission otherwise accepts other AT&T inputs per the Opinion and Order, it still clearly should instruct AT&T to rerun its compliance studies using the District-specific cable and structure investment data that Verizon DC placed on the record, and it should adopt rates reflecting that data.

B. The Commission Should Reconsider Its Decision Regarding Digital Cross-Connect System ("DCS") Costs Associated With the Interoffice Transport UNE.

Verizon DC seeks clarification of the Commission's ruling on the separation of Digital Cross-connect System ("DCS") costs from Verizon DC's dedicated transport UNE cost study.[234/] In the Order, the Commission concluded that "Verizon DC's refusal to unbundle DCS does violate the FCC's unbundling rule."[235/] The Commission thus required the parties to re-run Verizon DC's cost models "with digital cross-connect systems unbundled and provide a UNE

233/ *See* VZ-DC Post-Hearing Reply Br. at 29-30.

234/ VZ-DC Ex. 2D (Recurring Panel Reb.) at 130. The DS3 and STS1 transport studies include broadband DCS systems in some central offices. Broadband DCS permits automated interconnection of DS3 circuits from various sources, and may be located either at an intermediate central office or at a central office that serves as the terminal point for a transport circuit. *Id*. (Broadband DCS systems "are usually deployed at large transport hub offices and primarily support interconnections among very high capacity backbone transport systems, particularly SONET rings"). Because broadband DCS systems are used only for interconnection of facilities and do not have any of the additional capabilities that concerned the CLECs, the Commission's discussion of DCS does not apply to those systems.

235/ Opinion and Order ¶ 290.

rate for the digital cross-connection system."[236/] As explained below, Verizon DC is unaware of any operational arrangements (and there is no record evidence in support) that would allow a CLEC to access unbundled dedicated transport *without* installed DCS equipment, or to access unbundled DCS equipment *without* accessing the associated dedicated transport. For this reason, the Commission should clarify that, if AT&T chooses to order either of these two new UNEs without ordering the other, AT&T should be required to work with Verizon DC to identify an operational arrangement, including appropriate pricing, for access to that element in isolation.

As Verizon DC explained in its written testimony, Verizon DC has included certain DCS costs in its dedicated transport studies to provide functionality that is "inherent to the efficient provision of the dedicated transport UNE."[237/] These functions include, for example, multiplexing from a DS1 circuit to a DS3 circuit so that the circuit can travel on a high-capacity SONET transport system.[238/] Other critical functions provided by DCS systems include cross-connections and grooming.[239/] If DCS systems are removed from the transport network, these functions would have to be performed through alternative means (such as by using stand-alone multiplexers and manual cross-connections). To comply with the Order, Verizon DC has re-run its dedicated transport cost studies excluding DCS costs—and has not attempted to include the costs of alternatives to DCS.

Verizon DC seeks clarification concerning the circumstances under which AT&T may place orders using these new rates. Specifically, if AT&T seeks to order dedicated transport

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[236/] *Id.* ¶ 291.

[237/] VZ-DC Ex. 2D (Recurring Panel Reb.) at 130.

[238/] *Id.* at 129.

[239/] *Id.* at 129-30.

without DCS, AT&T must identify a technically feasible interconnection arrangement and equipment that it proposes to use to perform the essential functionality that would have been provided by Verizon DC's DCS systems. For example, if AT&T seeks to order a DS1 dedicated transport circuit between two offices and does not wish to pay for DCS functionality in connection with that service, AT&T must work with Verizon DC to identify how that DS1 circuit can be multiplexed up to a DS3 circuit for transport on a SONET system without the use of the DCS equipment for which AT&T does not wish to pay. If AT&T's proposed arrangement requires Verizon DC to incur additional recurring or non-recurring costs, then Verizon DC should be entitled to recover those costs. Similarly, if AT&T seeks to order unbundled DCS *without* dedicated transport, AT&T should identify the manner in which it proposes to access the DCS system without accessing dedicated transport. If AT&T's proposed arrangement requires Verizon DC to use equipment or otherwise incur costs not accounted for in the DCS rate ordered by the Commission, Verizon DC should be entitled to recover those additional costs.

Finally, Verizon DC seeks clarification that the Commission intended to remove DCS costs only from *dedicated* transport rates and not from *common* transport rates, as AT&T has done in its compliance filing. In its testimony, AT&T argued that "CLECs should have the same opportunity to decide when and where to use DCS *in dedicated transport circuits*."[240/] Since the only question presented to the Commission was whether to exclude DCS costs from the *dedicated* transport rate, it seems clear that the Commission had no intention of allowing AT&T to exclude those costs from the rate for *common* transport. Indeed, the Commission's reasoning with respect to exclusion of DCS costs from dedicated transport rates does not apply to common transport rates. Common transport consists of interoffice transmission facilities, "shared by

[240/] AT&T Ex. D (Recurring Panel Direct) at 131 (emphasis added).

Verizon DC and other carriers using Verizon DC's existing switch routing," and used by CLECs that purchase the UNE platform without customized routing.[241/] Thus, common transport is provided over Verizon DC's existing transport network using the same facilities that Verizon DC uses to transport its own calls. Because common transport does not consist of a facility dedicated to a particular CLEC, individual CLECs cannot dictate which equipment is used to provide that service. Thus, AT&T improperly removed DCS costs from the common transport rates in its December 16, 2002 compliance filing. For these reasons, the Commission should reject AT&T's proposed common transport rates and clarify that it did not intend to remove DCS costs from those rates.

C. The Commission Should Reconsider the Unreasonably Low Switching Rates It Adopted in Its Opinion and Order.

As with loop rates, the Commission adopted switching rates that are far lower than the rates adopted in other jurisdictions. Yet unlike loop costs where the District's unique geography and density result in comparatively lower costs in some cases, these factors do not have a corresponding impact on switching costs and rates. Indeed, as discussed, while the loop costs in the District are only 74% of the New York loop costs, the District's non-loop *costs* (for the port, switching usage, transport, and signaling) are 131% of those in New York. But on a cost-adjusted basis, the non-loop rates adopted by the Commission are approximately 75% *lower* than the rates adopted in New York.[242/] As noted above, the FCC has found that the New York rates

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[241/] VZ-DC Ex. D (Recurring Panel Direct) at 158.

[242/] These percentages reflect the relative cost differences between the District and New York, reflected in the FCC's Synthesis Model. *See* Attachment A.

are TELRIC compliant and has used them in numerous § 271 proceedings as a benchmark to determine the TELRIC-compliance of rates in other Verizon jurisdictions.[243/]

As discussed below, the Commission's findings with respect to switching costs, which simply rubber stamped all of AT&T's unsupported proposals, clearly violate TELRIC principles and well-established law.

1. The Commission's Use of a 100% New Switch Discount Is Contrary to Well Established Law.

The switching rates adopted by the Commission inappropriately reflect a 100% new switch discount, rather than an appropriate mix of new and growth discounts. This assumption is plainly contrary to TELRIC, as the FCC, other state commissions, and the D.C. Circuit have found in decisions that the Opinion and Order inappropriately ignores.

For example, in its reply brief to the Supreme Court in the *Verizon Communications v. FCC* case, the FCC unequivocally *rejected* the all-new switch discount assumption, holding that "TELRIC . . . does *not* assume that an efficient carrier would provide the switching element with large-capacity switches, rather than with a mix of smaller switches and so-called 'add-on modules.'"[244/] Similarly, in § 271 proceedings, the FCC has repeatedly rejected the argument that TELRIC requires a 100% new switch discount assumption. For example, in approving the Georgia Public Service Commission's adoption of "a meld of new and growth discounts," the FCC found "that AT&T is incorrect in asserting that the use of a mix of new and growth switch

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[243/] Memorandum Opinion and Order, *In the Matter of Application by Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a/ Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions), Verizon Global Networks, Inc. and Verizon Select Services, Inc. for Authorization to Provide In-Region, InterLATA Services in Rhode Island*, 17 FCC Rcd 3300, 3326-27 ¶ 53 (2002) ("*Rhode Island § 271 Order*"); *see also* Response of Verizon DC to Commission Order No. 12601 (Nov. 26, 2002).

[244/] VZ-DC Cross Ex. 10 (Reply Brief for Petitioners Federal Communications Commission and the United States, *Verizon Communications, Inc., et. al. v. Federal Communications Commission, et. al.*, Nos. 00-511, 00-555, 00-587, 00-590, and 00-602 at *9 n.7 (July 2001) (emphasis added)).

purchases in the cost model may never be used to determine forward-looking costs."[245] Likewise, in the New Jersey § 271 proceeding, the FCC rejected the argument "that Verizon should be required to assume 100% new switches," noting that it has "not previously required LECs to make such an assumption."[246] And, finally, the D.C. Circuit flatly rejected AT&T's claim that TELRIC requires a 100% new discount assumption, concluding that the "inclusion of growth additions" in the switch discount does not violate TELRIC.[247]

Notably, in repeatedly rejecting AT&T's all new discount assumption, the FCC has agreed with Verizon's position that a discount that mixes new and growth switch purchases reflects the manner in which an efficient carrier in a forward-looking environment would purchase switching equipment, and that no firm would install all of its switch capacity at one time.[248] As the FCC described, it is reasonable when determining the switch discount to take into account that "there will be growth in [the forward-looking] network in the future, and that it may not be cost-effective to acquire all of the projected need [for switching] at the outset."[249]

The FCC has also agreed with Verizon that in the unlikely event a carrier did purchase all new switches at once, no vendor would offer the all-new discount, because the higher discounts

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[245] *Georgia/Louisiana § 271 Order* at 9060 ¶ 82.

[246] *New Jersey § 271 Order* at 12284 ¶ 43; *Massachusetts § 271 Order* at 8990 ¶ 33; *Kansas/Oklahoma § 271 Order* at 6274 ¶ 77.

[247] *AT&T Corp. v. FCC*, 220 F.3d 607, 618 (D.C. Cir. 2000) (affirming the FCC's approval of the New York Public Service Commission's switching rates).

[248] VZ-DC Ex. 2B (Taylor Reb.) at 11-12; *see also* VZ-DC Ex. B (Taylor Direct) at 8 ("Because demand growth is uncertain and switches are used for a significant period of time, no firm would ever install all of its expected switching capacity *at one time*. Thus, a company . . . should not conduct its cost study assuming that it will replace these switches in every time period.").

[249] *Georgia/Louisiana § 271 Order* at 9060 ¶ 82.

offered for new switches are "*only* valid when an overall purchase of *both* new and growth equipment [i]s made."[250/] As Verizon DC's switching witness explained at the hearing:

> We don't believe that we would achieve that level of discount if we were to replace our entire network for the District of Columbia. It just—it doesn't make sense. Our vendors, in order to make their margin of profit, rely on these upgrades, rely on us to purchase line additions and trunk additions and peripheral additions to make their money. And they rely on the fact that they're going to charge us more for those additions, additional equipment and upgrades.[251/]

The D.C. Circuit agreed with this approach, explaining that "growth additions to existing switches cost more than new switches *only because* vendors offer substantial new switch discounts in order to make telephone companies dependent on the vendors' technology to update the switches."[252/]

Thus, the Commission's conclusion that "Verizon DC's use of the growth discount in estimating switching UNEs is not TELRIC-compliant" is clearly incorrect.[253/] Consistent with TELRIC and the FCC's rulings, Verizon DC has proposed a switch discount in this proceeding that reflects the mix of new and growth switch purchases that it expects to make in the District

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[250/] Memorandum Opinion and Order, *Joint Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Alabama, Kentucky, Mississippi, North Carolina, and South Carolina*, 17 FCC Rcd 17595, 17633 ¶ 80 (2002) ("*Alabama/Kentucky § 271 Order*") (emphasis added) (citing *Georgia/Louisiana § 271 Order* at 9059 ¶ 81); *see also* VZ-DC Ex. D (Recurring Panel Direct) at 140 ("Indeed, Verizon's switch vendors would not be able to offer steep discounted prices if the Company were to competitively bid the hypothetical scenario of replacing all of its switches at one point in time. More likely, the vendors costs would be *substantially* higher in order to meet the demand requirements of such a massive undertaking.").

[251/] Tr. at 402 (Matt).

[252/] *AT&T Corp. v. FCC*, 220 F.3d at 618 (emphasis added).

[253/] Opinion and Order ¶ 303.

on a going forward basis.[254/] This mix includes a small portion of new switch purchases—the same portion Verizon DC experienced in 2000 and expects to experience going forward.

The Commission also incorrectly concluded that Verizon DC's proposed discount is not forward-looking because it uses information from actual switch purchases from the year 2000.[255/] The FCC has repeatedly held that UNE switching rates may be based on actual switch purchases. The FCC stated, for example, that "[t]o develop forward-looking switch costs, it is reasonable to use current switch prices, reflecting actual purchases and existing vendor discounts, as a starting point."[256/] In addition, in approving SBC's Kansas and Oklahoma § 271 application, the FCC approved an ALJ's switching rates that were based on then-current prices, rather than future prices, because the ALJ found that such future prices were uncertain.[257/] Similarly, both the FCC and the D.C. Circuit approved the New York Public Service Commission's use of historic switch costs in setting UNE switching rates.[258/]

Even if the Commission's adoption of the 100% new discount assumption were lawful, which it is not, that decision would require the Commission to make other adjustments to account for the additional costs that necessarily would result from such an assumption—costs

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254/ *See* VZ-DC Post-Hearing Initial Br. at 90-91; VZ-DC Ex. D (Recurring Panel Direct) at 142-43.

255/ *See* Opinion and Order ¶ 301 (rejecting Verizon DC's proposed discount because "the growth discounts actually incurred [*sic*] in year 2000").

256/ *See Alabama/Kentucky § 271 Order* at 17634 ¶ 81 (approving BellSouth's use of information from actual switch replacement jobs in 1998 to determine its switch discount factor).

257/ *Kansas/Oklahoma § 271 Order* at 6274-75 ¶ 77.

258/ *See AT&T Corp. v. FCC*, 220 F.3d at 617. Furthermore, the Commission's decision in this respect is completely inconsistent with the reasoning underlying its decision concerning Verizon DC's proposed switch EF&I factor. As we discuss below, the Commission improperly adopted an EF&I factor that is based on 1992 data. Thus, the Commission itself recognizes that historical data can be a reasonable basis on which to set forward-looking costs.

that the Opinion and Order entirely ignores.[259] For example, the Commission's approach fails to include the costs associated with the network changes that would accompany an instantaneous replacement of all of its switches. If Verizon DC installed only new switches as the Commission assumes, with no plans to make growth purchases to expand capacity, Verizon DC's switches would need considerably more capacity at the outset. This increase in spare capacity would increase the initial switch investment and capital costs.[260]

Moreover, as Verizon DC explained, assuming all-new switch purchases would dramatically increase right-to-use ("RTU") fees, because those costs are typically associated only with the purchase of a new switch and are therefore not fully reflected in Verizon's cost data, which assumes a percentage of growth equipment. Verizon produced uncontroverted evidence that these right-to-use fees are approximately $2 million *per switch*.[261] Finally, as Dr. Taylor explained, "any costing methodology that assumed carriers would engage in wholesale replacement of switches whenever technology advanced or growth required additional capacity would have to assume an extremely high rate of depreciation and cost of capital."[262] The cost of capital adopted in the Opinion and Order, however, fails to consider the additional risks associated with replacing switches all at one time.[263]

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[259] Indeed, these errors produce rates drastically lower than the rates recently set by the Florida commission for Verizon, which are themselves below TELRIC. The Florida commission adopted a port rate of $2.40 and a MOU rate of $0.002257. *See* Final Order on Rates for Unbundled Network Elements Provided by Verizon Florida, *Investigation Into Pricing of Unbundled Network Elements*, No. 990649B-TP, FL P.S.C. at 308 (Nov. 15, 2002).

[260] VZ-DC Post-Hearing Initial Br. at 93.

[261] VZ-DC Post-Hearing Initial Br. at 99. In addition, Verizon recently produced evidence in the Massachusetts proceeding showing that the right-to use ("RTU") annual cost factor would increase from 0.0227 up to 0.0699 if the initial RTU fees associated with new switch purchases were included in the RTU factor calculation.

[262] VZ-DC Ex. 2B (Taylor Reb.) at 12.

[263] *See infra* section II.A.

The Commission clearly must reconsider and reject the 100% all new switch discount assumption adopted in the Opinion and Order. This assumption is inconsistent with TELRIC principles and the FCC's and D.C. Circuit rulings. Instead, the Commission should adopt Verizon DC's proposed switch discount, which is consistent with the forward-looking TELRIC principles. If the Commission believes, contrary to the facts, that Verizon DC's proposed discount does not accurately capture enough new purchases, then the Commission should *not* just simply adopt a 100% new discount, or even AT&T's alternative 90% new/10% growth discount,[264/] but instead should take notice of the alternative "life cycle" discounts Verizon recently provided to the Massachusetts Department of Transportation and Energy and to the FCC in the Virginia cost proceeding. In both of these proceedings, Verizon developed a melded discount by looking at ARMIS data and determining over a period of time how much of a switch was purchased at the new discount and how much at the growth discount. This analysis resulted in a discount mix of 65% new/35% growth in the Massachusetts proceeding, and 50% new/50% growth in the Virginia proceeding.[265/]

[264/] AT&T's so-called alternative 90% new/10% growth discount proposal is effectively no different from assuming a 100% discount. This proposal also incorrectly assumes that *all* switches are replaced instantaneously at the new discount, but then recognizes, as it must, at least a small number of growth purchases over the 3-year cost study period. *See* AT&T Br. at 43-44. But this proposal still grossly understates the appropriate amount of growth purchases to be assumed in a TELRIC study.

[265/] Verizon's proposal to the Massachusetts DTE and an explanation of the methodology Verizon used to derive the 50% new/50% growth discount proposed to the FCC in the Virginia proceeding are publicly available at Investigation by the Department of Telecommunications and Energy on Its Own Motion into the Appropriate Pricing, Based Upon total Element Long-Run Incremental Costs, for Unbundled Network Elements and Combinations of Unbundled Network Elements, and the Appropriate Avoided Cost Discount for Verizon New England, Inc. d/b/a Verizon Massachusetts' Resale Services in the Commonwealth of Massachusetts, MA P.S.C., Docket No. D.T.E. 01-20, http://www.state.ma.us/dpu/catalog/6479.htm (115Vzrepb.pdf, at 19).

2. The Commission Should Reconsider Its Allocation of Traffic Sensitive Costs Because It Misunderstood Verizon DC's Position on This Issue and Overlooked Record Evidence.

Verizon DC correctly allocated traffic sensitive switching costs to the per minute of use rate element and non-traffic sensitive costs to the port rate element. The Opinion and Order, however, mistakenly accepts AT&T's position that virtually all of the switch costs should be allocated to the port rate element.[266/] The Commission's decision has the perverse effect that CLECs with low volume customers, primarily residential customers, must subsidize CLECs that target primarily high volume business customers.

As an initial matter, the Commission appears to have misunderstood Verizon DC's position on traffic sensitive costs. Verizon DC's method of allocating switching costs is entirely consistent with cost causation principles; Verizon DC did not, as the Opinion and Order seems to suggest, argue that its method was based on policy considerations regarding direct and shared costs, rather than cost causation principles.[267/] Verizon DC simply made these policy arguments (as well as others) as further evidence to support its position on allocating traffic sensitive costs. Thus, the Commission's decision to reject Verizon DC's method and adopt AT&T's instead is based on a false premise and should be reconsidered on that ground alone.

In any event, Verizon DC provided significant testimony and other evidence, including testimony from witnesses with engineering backgrounds, demonstrating that, with the exception of the port, most of the switching costs vary with usage because Verizon sizes its switches to meet usage projections.[268/] Verizon DC also provided actual data showing that in fact Verizon

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266/ Opinion and Order ¶¶ 310-14.

267/ *Id*. ¶ 310.

268/ The Commission misinterpreted Verizon DC's rebuttal testimony in concluding that "Verizon DC agrees that items 1 [line termination costs for PRI and BRI] and 2 [other ISDN-related costs (such as Permanent Packet B

has been required to augment and replace *switching* resources because of exhaustion.[269/] In contrast, AT&T provided no credible evidence regarding switch usage, choosing simply to rely on a witness who is only an economist and who has *never* been involved in engineering and/or planning a switching network and has no other related qualifications or education.

For example, with regard to switch processor costs, Verizon DC demonstrated that a processor's size (and therefore its cost) depends on the expected level of usage, making processor costs inherently traffic-sensitive.[270/] While the goal is certainly to engineer such elements so that they can handle increased capacity, the reality remains that they can (and do) exhaust as usage increases.[271/] Thus, because the level of usage determines the amount of processor costs, those costs should be recovered through usage-sensitive rates rather than the fixed rates that are divided evenly among users. This reality is supported by the fact that during the time when dial-up internet access was increasing exponentially, the switching capacity in several central offices outside of the District was exhausted and caused significant call blockage until additional capacity could be added.

AT&T's approach, which was adopted by the Commission, incorrectly focuses on *when* the costs are incurred, as opposed to whether they are usage sensitive. According to AT&T, if Verizon DC does not size its switches correctly and is required to purchase additional capacity, then these costs are in fact usage-sensitive. But, it makes no sense to identify traffic sensitive

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and Additional D Channel Termination)] above should have been assigned to ports as [non-traffic sensitive] costs." Opinion and Order ¶ 313 (citing VZ-DC Ex. 2D (Recurring Panel Reb.) at 154). In fact, the cited testimony clearly states that the equipment components listed in item 2 should be treated as traffic-sensitive.

269/ *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 152-53; *see also id.* at 141-44 (listing examples of switch components that have been grown or replaced without purchase of new switch).

270/ *See* VZ-DC Post-Hearing Initial Br. at 98.

271/ *See* VZ-DC Post-Hearing Reply Br. at 41.

switching resources based on the accuracy of *ex ante* usage predictions.[272/] Rather, the fact that the processor costs vary with usage requires that those costs be recovered through a usage sensitive rate.

The Commission also improperly concludes that switch processor and other resources must be assigned to the non-traffic sensitive category or they "would be over-recovered as minutes of use grow."[273/] Verizon DC developed its switching costs by factoring in the total demand for ports, usage and vertical features, and placing them in the appropriate categories of usage sensitive versus non-usage sensitive. Thus, Verizon DC's methodology—incorporating its allocation of traffic sensitive and non-traffic sensitive costs—ensures it will neither over-recover nor under-recover costs.

In addition to violating cost causation principles, the Opinion and Order is wrong as a matter of policy because it would penalize residential customers. The FCC has recognized that whether the costs of shared facilities (*e.g.*, getting started costs), are recovered through traffic sensitive or non-traffic sensitive rates is a policy issue that rests within the discretion of the state commission establishing UNE rates.[274/] The Commission's approach of allocating such costs to

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[272/] The Opinion and Order also inappropriately allocates RTU fees (which recover switch software costs) as non-traffic sensitive. Opinion and Order ¶ 321. As Verizon DC explained, switch software is a shared resource, and a user that utilizes a larger share of that resource should pay a larger portion of its costs. In addition, higher usage levels can require augmentation of not only the processor, but also the software running on that processor. Because the RTU fees therefore vary by usage, they are appropriately classified as traffic sensitive. *See* Verizon DC Br. at 97-100. In addition, vertical features offered in the switch processor for which no service specific hardware is required, are recovered in the traffic sensitive Local Switching per minute of use UNE. Verizon DC also notes that AT&T, in its compliance cost study for SS7, failed to include RTU fees.

[273/] Opinion and Order ¶ 314.

[274/] *See* Memorandum Opinion and Order, *Application by Verizon New England, Inc., et al. for Authorization to Provide In-Region, InterLATA Services in Maine*, 17 FCC Rcd 11659, 11675-76 ¶¶ 28-29 (2002) ("*Maine § 271 Order*"). In Maine, AT&T argued that the Maine commission misallocated switching costs between the line port rate element and the MOU rate element. However, the FCC found the Maine commission had not committed a clear TELRIC error, noting that it has "declined to prescribe the appropriate allocation of switching costs as between

the non-traffic-sensitive port rate, however, unfairly shifts the burden of shared costs recovery to CLECs with low volume (residential) customers rather than the high volume (business) customers that ultimately cause Verizon DC to increase its switch capacity. The flat rate port element will be based on assumptions regarding average usage among all users of the switch. Because higher-than-average usage business customers will pay the same rate as lower-usage, typically residential customers, those customers who generate less than the average amount of traffic will subsidize those who generate higher than average volumes. In fact, AT&T has publicly announced that it intends to target high volume business customers.[275/]

The Commission's allocation of traffic sensitive costs also creates incentives that will ultimately harm the District's residential users. For example, because customers will pay the same rate regardless of their volume of usage, they can increase their usage without bearing any additional costs, thus creating inefficiencies and potential switch exhaust situations, which ultimately hurt all consumers in the District. Moreover, under the Commission's approach, CLECs will have little incentive to market to low volume users and will focus their marketing efforts on large volume customers because,on a per unit basis, they will have higher margins. Thus, the allocation of at least a portion of such costs to traffic sensitive rates is sound policy and will help reduce the adverse consequences associated with lower usage customers bearing a disproportionate share of costs.

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the line port . . . and the switching matrix" and finding that "[i]n establishing prices, the state commissions retain the discretion to consider a variety of factors." *Id.* at 11676 ¶ 29; *see also New Jersey § 271 Order* at 12292 ¶ 41.

[275/] *See* Telephony, News, The Last AT&T Story (February 4, 2002), at http://currentissue.telephonyonline.com/ar/telecom_last_att_story/index.htm.

Finally, the Commission's decision here, which results in *80%* of switching costs being assigned to the non-traffic sensitive fixed rate,[276/] is out of step with other states, which have allocated traffic sensitive costs in a manner that is much closer to Verizon DC's proposal here (62% non-traffic sensitive/38% traffic sensitive split).[277/] For example, the Pennsylvania commission recently issued a Tentative Order adopting a split of 55% traffic sensitive/45% non-traffic sensitive.[278/] In addition, in recently ruling on BellSouth's § 271 application with respect to five states, the FCC upheld switching rate allocations ranging from an allocation of *32%* fixed and 68% minutes-of-use in Alabama, to as low as *28%* fixed and 72% minutes-of-use in North Carolina and South Carolina.[279/] And the New York commission adopted a split of 34% traffic sensitive/66% non-traffic sensitive.[280/] Moreover, the Commission's mix of traffic sensitive/non-traffic sensitive costs is inconsistent with the FCC's own switching model, which allocates 70% of the switching costs to the traffic sensitive rate element, and 30% to the non-traffic sensitive element.[281/]

The Commission should thus reconsider its decision to allocate traffic sensitive costs to the port rate element and adopt instead Verizon DC's proposal.

276/ This allocation can be found under tabs "EO Matl Invest" and "TDM Matl Invest" in the backup files to Verizon DC's December 2002 compliance switching cost study.

277/ If the Commission-ordered GR-303 inputs are applied, the split would be 56% non-traffic sensitive/44% traffic sensitive. Because such technology assumptions, including the mix of switch vendors, impact the overall traffic sensitive split, Verizon's proposals and determinations by state commissions vary significantly.

278/ *Pennsylvania Tentative Order* at 144-46.

279/ *See Alabama/Kentucky § 271 Order* at 17640 ¶ 93; *see also Maine § 271 Order* at 11676 ¶ 29 ("We do not believe . . . that the Maine commission's allocation of 30 percent fixed to 70 percent MOU falls outside a reasonable range.").

280/ *New York UNE Order* at 36.

281/ *See Maine § 271 Order* at 11676 ¶ 29.

3. AT&T's Compliance Study Misapplies Traffic Sensitive Costs and Seriously Understates Verizon DC's End Office Switching Costs.

AT&T's compliance cost studies contain a serious error overlooked by the Commission, which results in a gross underestimate of Verizon DC's switching costs. As discussed above, the Commission erroneously decided to allocate four categories of switch costs as non-traffic sensitive, including processor, memory, and getting started costs.[282/] But AT&T's compliance filing accounts for the shift in resources in a way that underestimates Verizon DC's costs and fails to shift these costs consistently through the switching cost studies. Thus, at a minimum, the Commission should correct AT&T's egregious error.

Specifically, AT&T attempted a shorthand method of shifting costs to the port element that understates Verizon DC's costs far below the impact intended by the Commission's traffic sensitive determinations. To account for the shift of investment the Commission moved from the traffic sensitive rate elements to the non-traffic sensitive port rate, AT&T calculated a so-called port adjustment factor of 0.7111. AT&T applied this factor in Verizon DC's port cost studies in the place reserved for utilization factors. AT&T's factor, however, is *not* a utilization factor. The error in this method is that AT&T's port adjustment factor replaces entirely Verizon DC's utilization factor but itself does not account for utilization levels. Therefore, AT&T's method effectively assumes that Verizon DC's ports run at 100% capacity, completely ignores the fill levels set by the Commission's order, and underestimates Verizon DC's switching costs.

D. The EF&I Factor Adopted by the Commission is Backward-Looking and Unsupported by the Record.

The Commission incorrectly rejected Verizon DC's proposed switching EF&I factor of 40.27%, simply accepting AT&T's flawed and unsupported criticisms of Verizon DC's proposed

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[282/] Opinion and Order ¶ 311.

EF&I factor at face value and without considering the real record evidence submitted by Verizon DC. Indeed, in rejecting Verizon DC's proposed EF&I factor, the Commission inexplicably and improperly relies on data submitted by AT&T from a decade ago—*1992.*

First, the Commission's decision essentially concludes that data from *1992* is a better benchmark for determining future switch installation costs than Verizon DC's proposal, which relies on data from 1998, is unfounded, particularly given that the Commission simultaneously rebukes Verizon DC for not being sufficiently forward-looking by using data from *2000* to set its switch discount proposal.[283/] Moreover, this 1992 data is clearly outdated, and not at all representative of Verizon DC's forward-looking switching costs. In fact, the Commission appears to have misunderstood how Verizon DC's EF&I factor works in Verizon DC's cost studies.

The EF&I is based on the ratio of installation costs to material costs. Because the record evidence unequivocally demonstrates that material costs went down after 1992 (the vendors began offering much higher discounts after this date because of the large number of analog to digital switch replacements), and installation costs increased, the EF&I factor was appropriately higher in 1998 than in 1992.[284/] Indeed, the EF&I factor would have increased even if installation costs had remained the same. But there is no reasonable basis (and no record evidence) to assume that installation costs decreased from 1992 to 1998 faster than did material switching costs, as would have been required to support the Commission's EF&I factor.

283/ *See id.* ¶ 301-03.

284/ *See* VZ-DC Post-Hearing Reply Br. at 21. In this regard, the Commission's decision to decrease the EF&I factor is inconsistent with the all-new switch assumption it adopted elsewhere. Because the Commission substantially reduced Verizon DC's switch costs by assuming an all new switch discount, the Commission should have increased, not decreased, the EF&I factor.

The entire premise for the Commission's belief that Verizon DC's proposed EF&I factor must be too high, particularly if the 1992 data shows a lower number, by contrast, is based solely on the testimony of AT&T's economist, who has never purchased or installed a piece of switching equipment. The Commission's decision to adopt the proposal advocated by AT&T's economist is unfounded and should be reconsidered.

Finally, the Opinion and Order's EF&I factor is well below the level approved by the FCC and other state commissions. For example, the New York Public Service Commission approved a switch installation factor of 40%,[285/] and the Pennsylvania Public Utility Commission issued a Tentative Order approving a 40.2% factor.[286/]

The Commission should therefore reconsider and adopt Verizon DC's proposed EF&I factor, which is based on recent data, and is well within the range of switch installation factors that the FCC and other state commissions have found to be TELRIC-compliant.

E. The Commission Incorrectly Identified the Reciprocal Compensation Rate Elements.

Verizon DC seeks clarification of the Commission's statement of the rate elements that are charged as reciprocal compensation. The Commission correctly noted that, "[a]s required by the [federal 1996] Act, Verizon DC's forward-looking costs for reciprocal compensation include the *additional* costs of *terminating* such calls."[287/] It then stated, however, that "Verizon DC and

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285/ *New York UNE Order* at 36. As we note above, the FCC has repeatedly found that the New York switching rates, which reflect this EF&I factor, are TELRIC-compliant. *See, e.g., Rhode Island § 271 Order* at 3327 ¶ 53 (concluding that "Verizon's new New York rates fall within a reasonable TELRIC range and are, therefore, an appropriate benchmark for Rhode Island").

286/ *See Pennsylvania Tentative Order* at 53 (adopting the ALJ's recommendation); *see also Pennsylvania Recommended Decision* at 26 (noting that the parties' dispute "is a replay of an issue that was decided in the recent New York UNE Case" and recommending the acceptance of Verizon's EF&I of 40%).

287/ Opinion and Order ¶ 397 (second emphasis added).

CLECs should use the *originating end office usage*, terminating end office usage, the common end office trunk usage, common tandem trunk usage, and the common TOPS usage charges as the reciprocal compensation rate."[288/] The inclusion of "originating end office usage" in this list is, of course, incorrect and perhaps inadvertent; indeed, it is undisputed that reciprocal compensation applies to the *termination* of calls.[289/] Moreover, the Commission appears to have mistakenly included TOPS usage—which is not related to reciprocal compensation—rather than the often necessary tandem switching usage (not Common TOPS usage), which is properly included in reciprocal compensation when a CLEC delivers traffic to Verizon DC's tandem switch rather than directly to the end office destination.

Thus, the Commission should clarify that reciprocal compensation does not include "originating end office usage" and "common TOPS usage," but does include tandem switching usage.

F. The Commission Should Reconsider Its Decision to Adopt AT&T's Flawed Daily Usage File ("DUF") Rates.

The Commission incorrectly adopted AT&T's proposed Daily Usage File ("DUF") rate because it apparently could not verify that Verizon DC proposed DUF rates do not double-count costs that are recovered through Verizon DC's ACFs. But AT&T provided no evidence whatsoever to rebut Verizon DC's testimony that costs are removed from its ACF development

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288/ *Id.* (emphasis added).

289/ *See, e.g.*, 47 U.S.C. § 251(b)(5) (setting forth the duty of all LECs "to establish reciprocal compensation arrangements for the transport and *termination* of telecommunications) (emphasis added); *id*. § 252(d)(2)(A) (stating that a state commission's terms and conditions for reciprocal compensation will not be considered just and reasonable unless they "provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier").

in order to avoid any double-counting.[290/] The Commission's conclusion that there must be some double-counting because the DUF cost study is a "standalone cost study" and that "other studies will not affect DUF costs,"[291/] is incorrect and overlooks the fact that costs that are removed from the *ACFs* would not be apparent in the DUF study. In other words, the fact that the studies are not linked, so that an adjustment in one automatically impacts another, does not demonstrate that double-counting exists. The Pennsylvania commission recently agreed with Verizon on this issue in its Tentative Order, finding that there was no double-counting between Verizon's annual cost factors and DUF costs.[292/]

The Commission also incorrectly concluded, based on AT&T's misleading testimony, that Verizon DC's DUF rate is five to fifty times higher than those in other Verizon jurisdictions.[293/] First, AT&T's analysis includes outdated DUF rates, which were based on 1996 data and therefore do not capture all the appropriate DUF costs. Verizon has recently provided higher DUF cost estimates in the District and in other Verizon state UNE proceedings based on more recent estimates of DUF demand and expenses. Demand for DUF has been (and is expected to continue to be) much lower than Verizon initially anticipated in 1996. Since many DUF costs are fixed and are spread over all usage, the DUF rates Verizon now proposes are necessarily higher than those calculated in 1996 (and higher than rates in other jurisdictions that were based on the 1996 study). In fact, the Pennsylvania Commission recently agreed with Verizon and adopted its proposed DUF rate of $0.00153 per message recorded, finding that

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290/ *See* VZ-DC Ex. 2D (Recurring Panel Reb.) at 162.

291/ Opinion and Order ¶ 353.

292/ *See Pennsylvania Tentative Order* at 172.

293/ Opinion and Order ¶¶ 354-55.

"Verizon has sufficiently demonstrated on the record that the increase [in DUF rates] is due to a smaller anticipated DUF usage."[294/]

Moreover, the Commission ignores the fact that Verizon DC demonstrated its DUF rate per message recorded in New Jersey and Vermont are virtually equal to or greater than Verizon DC's proposed per message recorded rate.[295/] Indeed, Verizon DC's proposed per message recorded rate of $0.0015 is less than half the comparable Vermont rate of $0.003853. And Verizon DC's proposed per message recorded rate is equal to the rate in New Jersey.[296/] In addition, the AT&T proposed per message recorded rate of $0.000073 is astronomically lower than that proposed by Verizon DC because AT&T incorrectly used demand for "messages transmitted" in the calculation of the message "recorded" rate. The mistaken result drastically understates the Verizon DC proposed per message recorded rate by approximately 95%.

The Commission also found that Verizon DC's proposed DUF per message recorded rate should be rejected because Verizon DC admitted that the DUF process in the NYNEX region is more mechanized. The fact that systems are more mechanized, however, does not support the adoption of AT&T's unreasonably low DUF per message recording rate, which is approximately 98% lower than the DUF per message recording rate in Vermont, a NYNEX state.[297/]

The Commission should therefore reconsider its decision to adopt AT&T's DUF rates and instead adopt Verizon DC's proposals.

294/ *Pennsylvania Tentative Order* at 172.

295 *See* Letter from Natalie Ludaway, Leftwich & Douglas to Sanford M. Speight, Acting Secretary, DC P.S.C., Docket No. 962 at 1 (filed June 28, 2002).

296/ *See* i*d.*

297/ *See id.*

G. The Opinion and Order Improperly Averages OSS Costs.

The Opinion and Order correctly found that, as with other UNEs, Verizon DC is entitled to recover the costs of providing the Access to OSS UNE from the cost-causers—the CLECs.[298/] The Commission, however, misunderstood Verizon DC's cost calculations and mistakenly concluded that Verizon DC should have calculated a weighted average of OSS costs.[299/]

As Verizon DC explained in its testimony,[300/] Verizon incurred a variety of different costs in developing and providing the Access to OSS UNE. Verizon DC's cost study separately identifies and assigns those costs into discrete categories. For example, some of the OSS costs were incurred for activities that were performed throughout the Verizon East footprint (which includes the District). Distinct, additional OSS costs were incurred in *only* the Verizon East-South region (which *also* includes the District). Both sets of costs related to critical OSS activities. As Verizon DC noted in its testimony:

- The 1996 and 1997 costs associated with changes to the Verizon East-South core network systems were assigned to the Verizon East-South only category.
- The 1998 and 1999 costs associated with changes to the core network systems were assigned to the Combined (North and South) category (i.e., the entire Verizon East footprint).
- The costs associated with development of the gateway/interfaces were assigned to the Combined (North and South) category (i.e., the entire Verizon East footprint).[301/]

Thus, the activities and changes in the Verizon East footprint *and* the activities and changes in the Verizon East-South region were necessary for CLECs in the District to obtain Access to

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298/ Opinion and Order ¶¶ 381-85, 390-93.

299/ *Id.* ¶¶ 382-85.

300/ *See* VZ-DC Ex. D (Recurring Panel Direct) at 199-202, 206, 213-14.

301/ VZ-DC Ex. D (Recurring Panel Direct) at 200.

OSS. Accordingly, Verizon DC is entitled to recover the costs from both of these categories from CLECs in the District.[302/]

The Commission seems to believe that it is permitting Verizon DC such recovery. However, the Commission substantially reduced the amount Verizon DC will recover by incorrectly assuming that the Verizon East costs and the Verizon East-South costs were incurred for the *same* activities. Based on this misconception, the Opinion and Order calculates OSS costs by taking a weighted average of these two categories of costs.[303/] This makes no sense: Verizon DC actually incurred both distinct sets of costs and has a right to recover both of them.[304/] The Commission's error improperly reduces OSS rates by approximately 50%. The Commission should therefore reconsider this ruling and adopt Verizon DC's proposed OSS rates of $0.84 per line for the first 10 years, and $0.46 thereafter.[305/]

[302/] Of course, the charges that CLECs in the District will pay will allow Verizon to recover only a proportionate share of the region-wide costs for the Access to OSS UNE.

[303/] Opinion and Order ¶ 384.

[304/] These separate OSS costs can be analogized to the costs faced by a condominium owner. A condominium owner faces mortgage and interest costs for her apartment, as well as additional monthly condominium association fees for elevators and other common areas of her building. If she were to lease her apartment, she would attempt to recover both sets of costs in her rent. She would not calculate the rent by taking an *average* of the two categories of costs.

[305/] In addition, Table 8 of the Opinion and Order incorrectly lists the rates for OSS approved by the Commission. Table 8 listed a charge of $0.0838 per line for one-time OSS expenses and $0.00 for ongoing expenses. The rates approved in paragraph 384 of the Opinion and Order are $0.43 per line for the first 10 years and $0.24 per line thereafter. Thus, at a minimum, the Commission must correct this error.

IV. NON-RECURRING COSTS

A. The Commission Should Reconsider Its Refusal To Adopt Verizon DC's Non-Recurring Cost Model.

1. The FCC and Numerous State Commissions Have Adopted Verizon's Non-Recurring Cost Model.

Perhaps the most fundamental reason that the Commission should reconsider its rejection of Verizon DC's Non-Recurring Cost Model ("NRCM") is the FCC's recent decision approving essentially that same model, over AT&T's objection, as the basis for setting TELRIC-compliant non-recurring rates in Delaware. That decision should dispose of any doubts this Commission may have about the suitability of the Verizon NRCM. However, because the FCC's decision was released after the parties here filed their post-hearing briefs, the Commission did not have the benefit of the parties' analysis of the FCC's findings when it reached its decision. Indeed, the Commission did not address the FCC's decision at all, and appears to have overlooked it. It thus is particularly appropriate that the Commission take this opportunity to reconsider its decision in light of the FCC's explicit affirmation of the Verizon NRCM.

On September 25, 2002, the FCC granted Verizon approval to enter the long distance market in Delaware under § 271 of the federal 1996 Act.[306/] In doing so, the FCC expressly concluded that non-recurring rates developed using the Verizon Delaware NRCM (as modified by the Delaware PSC) were TELRIC-compliant. Specifically, the FCC found that, with certain adjustments made by the Delaware Commission, "Verizon's non-recurring cost model . . . produced [non-recurring costs] that fall within the reasonable range that TELRIC principles

306/ *Delaware/New Hampshire § 271 Order* at 18661 ¶ 1.

would produce."[307] In making this determination, the FCC specifically rejected AT&T's argument that Verizon's non-recurring rates were based on embedded rather than forward-looking costs and assumptions.[308] The FCC concluded that in approving and modifying the Verizon NRCM, the Delaware Commission had arrived at non-recurring rates that "were appropriately forward-looking."[309]

The non-recurring rates approved by the FCC in the *Delaware/New Hampshire Order* were derived using a model virtually identical to that which Verizon DC has proposed for use in this proceeding. As noted above, the Delaware Commission made certain adjustments to the Verizon NRCM which in its (and the FCC's) view made the model more forward-looking. Verizon DC's NRCM here reflects several of those same adjustments, thus making the FCC's approval of the Delaware NRCM all the more relevant to this proceeding. For example, Verizon DC's NRCM uses activity work times for the NMC (a Verizon work group formerly known as the "TISOC") developed using an Andersen Consulting study rather than the Verizon worker surveys, as the Delaware Commission had required.[310] Moreover, Verizon DC's NRCM is even more forward-looking than its Delaware predecessor: The Verizon DC NRCM employs more recent forward-looking adjustment factors that further reduce the forward-looking work times assumed for certain Verizon work groups (and therefore produce lower costs). The FCC's

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[307] *Id.* at 1871a ¶ 86; *see also id.* at 18716 ¶ 93 ("[W]e conclude that Verizon's Delaware NRCs fall within the range that reasonable application of TELRIC principles would produce.").

[308] *See id.* at 18708 ¶ 82.

[309] *See id.* at 18710 ¶ 84.

[310] *See id.*; Findings, Opinion and Order No. 5967, *Application of Verizon Delaware, Inc. (F/K/A Bell Atlantic-Delaware, Inc.), for Approval of Its Statement of Terms and Conditions Under § 252(f) of the Telecommunications Act of 1996*, Docket No. 96-324 Phase II, DE P.S.C., 34 (June 4, 2002) ("*Delaware UNE Order*"); *see also* VZ-DC Ex. E (Bennett Direct) at 15-16.

finding that the Verizon Delaware NRCM was TELRIC-compliant thus should apply with greater force to Verizon DC's NRCM.

The Commission should give significant weight to the FCC's conclusion that the Verizon NRCM produces TELRIC-compliant rates, not only because the FCC closely considered the Verizon model and the objections thereto in reaching its decision, but because the FCC's interpretation of its own TELRIC rules should "be given controlling weight unless it is plainly erroneous or inconsistent with the regulation."[311/]

Moreover, the Commission's rejection of the Verizon NRCM is out of step with the decisions of numerous other state commissions that have considered the current Verizon model. Those state commissions have approved essentially the same Verizon NRCM for the determination of TELRIC-compliant non-recurring rates over the same objections that AT&T raised here, and typically have selected the Verizon model in place of the competing model proffered by AT&T. For example, after an extremely detailed ALJ review, the New York commission adopted the ALJ's recommendation and approved use of the Verizon NRCM, accepting some of the non-recurring costs produced by that model without alteration, while adjusting others.[312/] Similarly, as noted, the Delaware commission employed Verizon's NRCM, with some adjustments,[313/] as did the Massachusetts commission,[314/] the Rhode Island

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311/ *Stinson v. United States*, 508 U.S. 36, 45 (1993) (internal quotations and citations omitted); *see also Darrell Andrews Trucking, Inc. v. Federal Motor Carrier Safety Admin.*, 296 F.3d 1120, 1124 (D.C. Cir. 2002) (court owes "substantial deference" to agency's interpretation of "its own regulations"); *Sisson v. District of Columbia Board of Zoning Adjustment*, 805 A.2d 964, 968 (D.C. 2002) (agency's interpretation of its own regulation should be accorded great deference and upheld "unless it is clearly erroneous or inconsistent with the regulations") (internal quotations and citations omitted).

312/ *New York UNE Order* at 33-34.

313/ *Delaware UNE Order* at 31-35.

314/ *See Massachusetts UNE Order* at 432-500.

commission,[315] and the New Jersey commission.[316] There is no valid basis for this Commission to find that the Verizon NRCM now somehow is entirely incapable of producing TELRIC-compliant rates when it is being successfully used in so many other jurisdictions and has been approved by the FCC.

2. The Rationales Relied on in the Opinion and Order for Rejecting the Verizon NRCM Are Invalid, Contrary to the Record, and Inconsistent with the Findings of the FCC and Other State Commissions.

The Commission provides three rationales for rejecting Verizon's NRCM. As described below, the Commission's conclusions are contrary to the record and unjustified. But even if one or more of these concerns *were* valid, the proper response clearly would not be wholesale rejection of Verizon's NRCM. Rather, as so many other state commissions have done in response to similar types of criticisms, the Commission should in that event order that Verizon DC make whatever adjustments and modifications to the model the Commission has determined are necessary to bring the rates into compliance with TELRIC. This would be a preferable and far more reliable means of producing realistic, TELRIC-compliant non-recurring rates for all elements than relying on the entirely fictional and incomplete AT&T model.

a) The Verizon DC NRCM Is Appropriately Forward-Looking.

In rejecting Verizon DC's NRCM, the Commission asserted that "Verizon DC . . . bases its OSS system and nonrecurring cost estimates on its existing network and OSS system with forward-looking adjustments to some expenses."[317] According to the Commission, this approach

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[315] *See* Report and Order, *Review of Bell Atlantic-Rhode Island TELRIC Study*, Docket No. 2681, RI P.U.C., 62-69 (Nov. 18, 2001) ("*Rhode Island UNE Order*").

[316] *New Jersey UNE Order* at 157-67.

[317] Opinion and Order ¶ 417.

precludes a finding of TELRIC-compliance.[318/] But the Commission's conclusion is precisely the argument that the FCC rejected in its *Delaware/New Hampshire Order*. Indeed, the record evidence in this case shows beyond question that Verizon DC's NRCM is explicitly forward-looking.

While Verizon DC's NRCM starts with existing times and tasks derived from its employee survey, it then explicitly adjusts those times (and the frequency with which tasks will need to be performed) to account for forward-looking efficiencies. In particular, a panel of Verizon subject matter experts with expertise in provisioning UNEs derived forward-looking adjustment factors to account for how the deployment of the most efficient currently available technologies, mechanization, and process improvements could reduce the time needed to perform an activity and/or the frequency with which an activity is performed.[319/] Verizon DC then applied those factors to existing work times and tasks to derive the forward-looking task times used in its studies, even if Verizon DC had no real-world plans to deploy the new technology or process.

In approving Verizon's NRCM in the *Delaware/New Hampshire Order*, the FCC squarely rejected AT&T's argument that because it began with the existing network, Verizon's approach produced rates that were "based on existing, embedded processes."[320/] This finding is consistent with the FCC's previous rejection of the argument that TELRIC forbids any reference to existing networks. Reviewing the rates set by the Georgia state commission, the FCC specifically found that, even where BellSouth had modeled loop rates using the existing network

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318/ *See id.*

319/ VZ-DC Ex. E (Bennett Direct) at 18; VZ-DC Ex. 3E (Peduto Surrebuttal) at 2.

320/ *See Delaware/New Hampshire § 271 Order* at 18708, 18711 ¶¶ 82, 86.

as its starting place, the resulting rates were TELRIC-compliant: "While BellSouth's loop model *was based on a sample of existing loops*, the record demonstrates that loops *were redesigned to reflect forward-looking criteria* rather than reproducing the existing network."[321/] As previously noted, this is of course the only sensible outcome: Existing systems (and costs) constitute the most logical and indeed the *only* empirical evidence to use as a *starting place* for the derivation of forward-looking costs. In order to assess the costs of a most-efficient telecommunications network, it is entirely reasonable to begin with the costs of an existing functioning network and to then *adjust* those costs to reflect the modifications that would increase the network's efficiency. Any other approach would be an exercise in pure speculation, requiring that all costs be hypothesized from scratch, and none informed by real world data.

Not surprisingly, then, numerous other state PUCs have rejected the notion that Verizon's NRCM is not forward-looking. For example, the New York commission agreed with the administrative law judge's rejection of AT&T's argument that the fact that Verizon's model studied existing systems and costs as a starting point vitiated the model's forward-looking nature, finding that Verizon's forward-looking adjustments were sufficient to render Verizon's model forward-looking.[322/] Similarly, as noted above, the Delaware commission determined that the NRCs resulting from Verizon's model, as modified, "reasonably reflect[ed] the cost of performing these non-recurring tasks using the 'most efficient telecommunications technology

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321/ *See Georgia/Louisiana § 271 Order* at 9040 ¶ 36 (emphasis added).

322/ Recommended Decision on Module 3 Issues, Case 98-C-01357, Proceeding on Motion of the Commission to Examine New York Telephone Company's Rates for Unbundled Network Elements (N.Y. Pub. Serv. Comm'n, May 16, 2001) ("*New York Recommended Decision*") at 186-87; *New York UNE Order* at 33-34.

currently available and the lowest cost network configuration,' and not simply the cost to Verizon-DE of performing these tasks now or in the future."[323/]

b) The Commission Should Not Have Rejected the Verizon NRCM on the Basis of the Model's Network Architecture Assumptions.

The Commission also rejected Verizon DC's NRCM on the grounds that its non-recurring and recurring cost models do not adopt consistent network assumptions, because the NRCM assumes a lower level of IDLC feeder than the recurring cost model.[324/] The Commission concluded that "the same network architecture should be used for both recurring and nonrecurring cost models."[325/]

This issue does not provide a justification for rejecting Verizon DC's NRCM. The *only* difference in the technology mix assumed in Verizon DC's recurring and non-recurring cost studies is that the non-recurring model assumes that 1% of all loops use IDLC—the amount Verizon DC actually expects to have in place by the end of the three-year planning period—while the recurring model assumes 16% IDLC.[326/] Although Verizon DC explained the valid reasons for these differing assumptions,[327/] if the Commission still believes the two should be consistent, Verizon DC's NRCM would easily allow that input to be changed to match the recurring assumption. Thus, a more reasonable course is not rejection of Verizon DC's model, but simply a change in one input. Moreover, because non-recurring costs are largely labor-

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323/ *See Delaware UNE Order* at 35; s*ee also New Jersey UNE Order* at 158.

324/ *See* Opinion and Order ¶ 418.

325/ *See id.*

326/ VZ-DC Ex. E (Bennett Direct) at 25.

327/ *Id.*

related, this difference in technology mix has a very limited effect. Changing the UDLC/IDLC mix in the NRCM so that it matches the recurring model reduces only *one* category of provisioning costs: those associated with *new* UNE-Ps.[328/] It has no effect on any other non-recurring cost, including the cost of the more common UNE-P migration. Given this very limited effect, and that the IDLC input can in any event be easily changed, the Commission's desire for consistent technology assumptions is not a basis to reject Verizon DC's NRCM. Indeed, as discussed below, AT&T's NRCM has far more basic network architecture inconsistencies with the recurring model that the Commission adopted here. Thus, the Commission's determination that the recurring and non-recurring models should be consistent mandates that the Commission reject AT&T's model and adopt Verizon DC's model instead, modifying it if necessary.

c) Verizon DC's NRCM Does Not Result in Double-Recovery.

The Commission also rejected Verizon DC's NRCM on the ground that Verizon improperly classified some of the costs for manual tasks in both the non-recurring and recurring cost categories and was, therefore, double-recovering those costs. Specifically, the Commission found that Verizon DC had included "expenses for maintenance, repair, and testing of facilities . . . in recurring costs through the network factor [annual cost factor] and in nonrecurring costs as explicit charges."[329/] Similarly, the Commission found that Verizon DC was recovering its costs for database maintenance in recurring costs as a maintenance and repair factor included in the Annual Cost Factor ("ACF") and in non-recurring cost models as an explicit charge.[330/] But this

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328/ VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 73; Tr. at 415-16 (Peduto).

329/ Opinion and Order ¶ 423 n.832.

330/ *Id.* ¶ 436.

conclusion is contrary to the record. Verizon DC has taken steps to ensure that costs are not double-counted. Verizon DC's non-recurring rates recover costs only for those costs that are incurred in response to a specific event initiated by a specific cost causer, and thus exclude any items included in the recurring model's ACFs.[331/]

Verizon DC has ensured that the ACFs for maintenance, repair, and testing of facilities do not recover costs also recovered by its non-recurring rates. Specifically, Verizon DC subtracted from its base year expense figure *all* non-recurring revenues it received during that year. These non-recurring revenues serve as a proxy for the non-recurring costs Verizon DC incurred during that year. By removing those revenues before calculating the ACFs, Verizon DC ensured that it will not double-recover for non-recurring costs through application of the ACFs on the recurring side.[332/] The Opinion and Order ignores entirely this step Verizon DC took to avoid any double-recovery, and should be reconsidered.

In addition, the Commission's conclusion that adoption of Verizon DC's NRCM would result in double-recovery for database maintenance is erroneous because it fails to distinguish between two different types of "database maintenance." The first type of database maintenance occurs when Verizon DC periodically scans its provisioning databases for inconsistent data and performs cross audits among the systems to ensure that the information residing in the systems is synchronous. The costs of this sort of routine maintenance are properly recovered on a *recurring* basis through, for example, the common overhead and other support factors in Verizon DC's models.[333/] The second type (which is not even properly termed "database maintenance") occurs

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331/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 66-68, 84-85.

332/ *See id.* at 67-68.

333/ *Id.* at 62-63, & n.20.

when Verizon DC discovers an error in its database in the course of processing a particular CLEC order. In such a case, Verizon DC will correct the information on the order, *not* the information in the database. The charges for these event-driven corrections are properly billed on a *non-recurring* basis.[334/]

B. The Commission Should Reconsider and Reverse Its Adoption of the AT&T Non-Recurring Cost Model.

Even if the Commission were not prepared at this juncture to accept Verizon DC's NRCM, the Commission should not have accepted AT&T's model without extensive adjustments to its inputs and assumptions.[335/] As Verizon DC explained in detail in its testimony, AT&T's model is replete with wildly unrealistic assumptions that either wish away or simply fail to account for significant costs Verizon DC will incur in the provision of UNEs. The model also fails to develop non-recurring rates for a majority of the UNEs that Verizon DC must offer. And adoption of the AT&T model logically and necessarily would require an increase in *recurring* UNE rates, because, while the AT&T non-recurring cost model assumes that many non-recurring costs are recovered in recurring rates, the Verizon DC recurring cost model adopted by the Commission does *not* account for these costs—a critical inconsistency. Indeed, in a number of cases the Commission appears to acknowledge the validity of a criticism raised by Verizon DC—or to recognize that AT&T admitted a flaw in its model—but nonetheless fails to modify the AT&T NRCM to account for its acknowledged failings.

334/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 84-85.

335/ *See* Opinion and Order ¶ 418.

As Verizon DC shows here, the myriad flaws in AT&T's model require reconsideration of the Commission's decision to rely on the AT&T model. At minimum, the Commission must account for the significant gaps and shortcomings in the AT&T model.

1. AT&T's Model Fails To Include Costs for Numerous Relevant Elements and Activities.

In a blatant attempt to minimize non-recurring rates, AT&T does not account in its model for a large category of non-recurring costs. First, AT&T simply fails, without explanation, to include non-recurring activities associated with the large majority of UNEs, including various types of hot cuts, subloops, many varieties of ports, AIN development, and others. In total, the AT&T model produces non-recurring costs for fewer than 30 UNEs[336/]—as compared to the more than 100 UNEs (and related services) that Verizon DC is required to provide, and for which the Verizon DC NRCM accordingly produces non-recurring costs.[337/] As a result, even if the AT&T model were used to generate some non-recurring rates, some other approach would have to be used to determine the non-recurring rates for the missing UNEs.

Second, AT&T's model, as approved, does not account for many costs that AT&T deems "recurring" but that are not, in fact, reflected in the recurring cost models approved by the Commission. AT&T insists that many costs associated with one-time, non-recurring activities performed in connection with CLEC UNE orders should be recovered on a *recurring* basis, and AT&T therefore has purposefully omitted those costs from its non-recurring model. For example, AT&T acknowledges that Verizon DC will incur the costs of field installation in

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336/ The AT&T model ostensibly accounts for 49 UNEs. Of these, however, several are associated with Total Service Resale ("TSR") services, which are not properly classified as UNEs, and a number account merely for the "disconnect" side of an UNE. Once the list is pared down appropriately, it is clear that the model produces costs for fewer than 30 UNEs.

337/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 58; *see also* Opinion and Order ¶ 408.

provisioning CLEC orders, but assumes that those costs should be recovered on a recurring basis.[338/] Similarly, the Commission agreed with AT&T that "the placement of a physical cross-connection at the FDI should be included in recurring costs."[339/] The Commission asserts that "[t]he choice of [AT&T's] model excludes [Verizon DC's] costs from nonrecurring charges because they are already included in recurring costs."[340/] But while the choice of AT&T's non-recurring model *does* require that these costs be recovered through recurring rates, absent an adjustment to increase the recurring rates, there is no basis to assert that these costs are "already included" in the recurring rates. To the contrary, Verizon DC's recurring cost model, which the Commission has used to determine recurring rates, does not account for these "transferred" non-recurring costs, because Verizon DC's recurring model assumes that these costs should be and are recovered on a *non-recurring* basis.

The Commission itself notes the need for the recurring and non-recurring cost models to be consistent, yet AT&T's model is fundamentally *inconsistent* with the recurring cost model adopted by the Commission. The AT&T non-recurring model thus cannot be used without adjustments to account for the additional non-recurring costs AT&T's non-recurring model assumes are recovered elsewhere. There is no suggestion that the costs at issue here are not incurred; the question is only how they should be recovered. Thus the present state of affairs, in which legitimate costs simply go *unrecovered*, cannot stand.

Although the costs could, in theory, be added to the current recurring rates—and the Commission should at a minimum make such an adjustment—that shifting of non-recurring costs

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338/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 50; *see also* Opinion and Order ¶¶ 437-39.

339/ Opinion and Order ¶¶ 437, 441; *see also* AT&T Ex. B (Walsh Direct) at 23.

340/ Opinion and Order ¶ 441

to recurring rates would be inconsistent with the principle of cost-based pricing. Non-recurring costs are one-time costs that are incurred as a direct result of receiving and filling a CLEC request for service, and are not associated with the initial investments necessary to provide network facilities or with generally maintaining those facilities. Thus, these costs are properly recovered through non-recurring rates, *not* through either the investment or expense portion of recurring rates. As the FCC has stated, "costs should be recovered in a manner that reflects the way they are incurred."[341/]

Unlike recurring costs, non-recurring costs are incurred in response to a specific event by a specific cost causer, and involve easily identifiable, concrete expenses. It would be inefficient to spread such a concrete expense over an estimate of future usage through a recurring rate, which could later prove to understate or exaggerate TELRIC costs. In order to ensure that CLECs have the correct incentives to target customers, invest in facilities, and establish efficient prices, they should be required to cover those costs that are a direct result of their actions.[342/] Accordingly, the Commission should reconsider its decision and reject the AT&T non-recurring model.

Third, AT&T's model expressly disregards an entire category of costs that the Commission expressly found were properly classified as non-recurring. During the proceeding, AT&T contended that costs for activities that might benefit more than one provider should be excluded from non-recurring costs.[343/] The Commission rightly rejected this argument: "AT&T's definition of NRC is too limiting. Although a UNE may be used in the future by

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[341/] *Local Competition Order* at 15873 ¶ 742.

[342/] *See* VZ-DC Ex. 2B (Taylor Reb.) at 16-18; VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 66-67.

[343/] AT&T Ex. B (Walsh Direct) at 9-11.

another CLEC, the ILEC may still recover its NRCs in providing the UNE."[344/] However, the Commission has adopted AT&T's model—which excludes such activities—and has made no attempt to modify that model accordingly.[345/] This approach is internally inconsistent. Absent reconsideration, the Commission's determination that AT&T has defined non-recurring costs too narrowly will be given no effect, and Verizon DC will be precluded from collecting non-recurring costs to which the Commission has properly determined it is entitled.[346/]

2. AT&T's Proposed Work Times Are Based Entirely on the Opinions of So-Called "Experts" with No Experience Provisioning UNEs and Every Incentive To Produce Biased Results.

The AT&T model relies on no actual data to estimate forward-looking non-recurring task times or the frequency with which tasks will have to be performed, but solely on the opinion of so-called "subject matter experts." As AT&T expressly admitted, its "experts" have never provisioned a single UNE, and, in most cases, have little or no experience with respect to each given task.[347/] Nor is it clear *how* AT&T's experts estimated their hypothetical work times. Nowhere in its testimony or its model does AT&T suggest that its experts relied on any real

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344/ Opinion and Order ¶ 407.

345/ *See, e.g., id.* ¶ 437 (summarizing AT&T's argument that costs for cross-connection are not non-recurring because the "cross-connection can be reused by another CLEC").

346/ While the AT&T NRCM fails to account for numerous genuine non-recurring UNEs, it *does* appear to include costs for certain resale service that are not UNEs at all. Specifically, the AT&T NRCM includes two "Total Resale Service" UNE rates, which purport to represent the non-recurring charges to be assessed on resellers in the District. But the inclusion of resale rates in a TELRIC cost study is utterly contrary to the governing law. Under the Act and the FCC's implementing regulations, UNE rates are determined using the TELRIC standard, which is intended to reflect "the cost . . . of providing the . . . network element." 47 U.S.C. § 252(d)(1). In contrast, resale rates are *not* calculated using TELRIC, but rather "on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier." *Id.* § 252(d)(3). The Commission should therefore clarify that resold services shall be priced by applying the discounts adopted in the Opinion and Order to the applicable tariffed retail rates, as required by the Act—*not* by applying the rates set forth in AT&T's NRCM.

347/ *See* VA Tr. at 4651 (Walsh); VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 60-61.

world data or any study of existing task times; AT&T similarly never explains the basis for the "forward-looking" assumptions its experts made.[348/] The task times that form the basis for AT&T's entire model are thus nothing more than the pure hypothetical speculation of AT&T's so-called "experts." Such entirely fictional assessments cannot produce non-recurring cost estimates that bear any relevance to the forward-looking costs that Verizon DC or any carrier would incur to provision CLEC UNE orders in a real world, operational network.

AT&T's ad hoc approach to estimating forward-looking work times raises an even more fundamental concern: By grounding its assumptions entirely on the opinions of paid consultants, AT&T's model is especially susceptible to the threat of bias—an objection that AT&T raised about Verizon DC's far more reliable survey methodology.[349/] AT&T's "experts" were retained solely for the purpose of developing costs for regulatory proceedings such as this one. They accordingly were well aware of the results that AT&T expected: shorter task times, and tasks that need to be performed less frequently if at all. AT&T pointed to no safeguards that might reduce the heightened concerns about bias that its methodology inevitably produces, and this lack of safeguards, together with the lack of any real world data, renders AT&T's approach meaningless.

3. AT&T's Model Relies on Inefficient and Unavailable Technologies and Network Assumptions.

AT&T's non-recurring cost model is also flawed by its presumption that Verizon DC will employ technologies or processes that are not "currently available," in direct violation of clear TELRIC principles enunciated both by the FCC and most recently by the Supreme Court, as

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348/ *See* VA Tr. at 4651 (Walsh); VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 60-61.

349/ *See* VZ-DC Post-Hearing Initial Br. at 110.

discussed above.[350/] The model also bases non-recurring assessments on grossly inefficient network design assumptions that would entail significant *recurring* costs that are never accounted for. As such, the model not only fails on its face, but also is incompatible with the recurring cost model adopted by the Commission.

As the FCC's rules and the Supreme Court in *Verizon* make clear, TELRIC costs may be assessed only on the basis of technology that is "currently available."[351/] The Court noted that this rule was a significant factor in ensuring that TELRIC was a reasonable costing methodology, because it ensured that "the marginal cost of a most-efficient element that an entrant alone has built and uses would not set a new pricing standard until it became available to competitors as an alternative to the incumbent's corresponding element."[352/]

Nevertheless, the AT&T model repeatedly assesses costs on the basis of hypothetical technology that is *not* currently available. For example, AT&T asserts that the costs of processing CLEC orders can be reduced to a significant degree based on automated order processing mechanisms that it admits do not exist and have never been deployed by any carrier.[353/] AT&T's model allows for *no* manual processing in the ordering stage, on the theory that Verizon DC's OSS will somehow catch *all* CLEC errors and send orders with errors back to the CLEC automatically. But AT&T conceded that it could point to no carrier or existing system

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350/ *Verizon Communications*, 122 S. Ct. at 1670.

351/ 47 C.F.R. § 51.505(b)(1); *Verizon Communications*, 122 S. Ct. at 1670. As noted above, the Commission appears to have misunderstood this "currently available" requirement, which appears both in the regulations implementing the TELRIC standard and in the Supreme Court's affirmation of that standard.

352/ *Id.*

353/ *See* VA Tr. at 4662 (Walsh).

that processes and provisions UNE orders with the level of automation it assumes.[354/] Indeed, in its recent *Florida/Tennessee 271 Order*, the FCC also noted AT&T's concession, during the Florida UNE proceeding, that it knew of no "fully automated ordering system" that had been implemented by any carrier in any state.[355/] AT&T's non-recurring model is also premised on an unrealistically optimistic 2% fallout rate at the provisioning stage, although, as the Commission itself recognized, AT&T "admitted that a 2% fallout rate for provisioning OSS had not yet been obtained," and "has not found any carrier or OSS that automatically handles all UNE orders."[356/] In fact, a 2% fallout rate is optimistic even for the very simplest of orders, and it is not *possible* to achieve, at least given currently available technology, for more complex orders.

Furthermore, some orders are, and will continue to be, designed to be handled manually. AT&T does not account in any way for cases where manual handling by design is either necessary or cost effective—even though its own witness, Mr. Walsh, conceded that it would *not* be efficient to automate all tasks.[357/] As Verizon DC has explained, despite advances in technology, there are some low-volume and complex tasks that continue to be more efficiently performed manually because the one-time cost of automating them would outweigh the costs of performing them manually over time.[358/]

354/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 23-24, Att. B (AT&T Response to VZ-DC Data Request I.146, 147).

355 *See* Memorandum Opinion and Order, *In the Matter of Application by BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Authorization to Provide In-Region, InterLATA Services in Florida and Tennessee*, WC Docket No. 02-307 ¶¶ 37, 41 (rel. Dec. 19, 2002) ("*Florida/Tennessee § 271 Order*").

356/ Opinion and Order ¶ 429; *see* VA Tr. at 4662.

357/ *See* VA Tr. at 4658; *see also* VZ-DC Ex. 3E (Peduto Surrebuttal) at 4 ("[O]rders for partial account migrations, for certain complex lower volume products, and for more than five lines are designed to drop out of the system for manual handling.").

358/ *See id.* at 4-5.

Similarly, AT&T assesses the costs of provisioning standalone loops on the assumption that IDLC can be used to unbundle loops in a multi-carrier environment via a GR-303 interface; this assumption allows AT&T to ignore costs associated with manual connection of the Verizon-owned loop to the CLEC switch. However, as discussed in detail above, the FCC and several other state commissions have concluded, and the record here demonstrates, that it is not technically feasible to provision standalone loops electronically using any currently available—or even foreseeable—technology.[359/] Not surprisingly, then, AT&T could cite no local exchange carrier that currently unbundles loops electronically via GR-303.[360/]

AT&T's model also improperly seeks to reduce non-recurring costs by making unrealistic and inefficient network assumptions that would dramatically increase recurring costs—although neither AT&T's recurring cost model, nor the Verizon model adopted by the Commission, actually accounts for these costs. For example, AT&T assumes that the forward-looking network would ubiquitously deploy 100% Dedicated Inside Plant ("DIP"). DIP refers to the assignment of switch line equipment to outside plant cable facilities on the Main Distributing Frame ("MDF").[361/] On a conventional MDF, switching line equipment must be connected to outside plant at the MDF using a "cross-connect" cable to establish service to the end user.[362/] When the customer disconnects service, Verizon DC typically removes the MDF cross-connect

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[359/] *See, e.g.*, *Massachusetts UNE Order* at 154-55 ("[W]e agree with Verizon that GR-303 with unbundling capability at the DS0 level . . . is still hypothetical and not a TELRIC-compliant technology upon which to base UNE rates."); *Georgia/Louisiana § 271 Order* at 9046 ¶ 50 (technology alleged by CLECs to have the capability of unbundling loops electronically "has limitations" and "ha[s] not proven practicable"); VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 43-44, 51-57, 73-78; *see also* VZ-DC Ex. 3E (Peduto Surrebuttal) at 2-3.

[360/] *See* VA Tr. at 4619 (Riolo).

[361/] *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 35.

[362/] *See id.*

between the switch line and the outside plant cable pair so that the switch line can be used to connect to another cable pair associated with another end user.[363/] However, in an environment employing DIP, the jumper is simply left in place.[364/]

There is no support whatsoever for the 100% DIP environment hypothesized by AT&T. Indeed, as AT&T admitted, *no* carrier in the real world actually employs such a practice because it is inefficient and costly.[365/] In a 100% DIP environment, Verizon DC would have to add significant additional switching equipment so that *every* feeder pair in the central office could be pre-connected to the switching line equipment. This, in turn, would require Verizon DC to increase its stock of switching equipment dramatically, even though much of that equipment would necessarily remain idle at any given time.[366/] The 100% DIP approach would therefore increase *recurring* costs substantially, requiring users to subsidize excessive switching plant that serves no purpose whatsoever.[367/] And this increase in recurring switching costs would more than offset the marginal decrease in *non-recurring* costs AT&T claims will result from the presence of cross-connects linking the switching plant to the outside plant. But the increased recurring costs entailed by the 100% DIP assumption simply are not reflected in the recurring cost model adopted by the Commission—particularly in light of the high utilization factors adopted in the Opinion and Order. Adoption of the AT&T non-recurring cost model is thus incompatible with the Commission's other decisions in this case.

363/ *See id.*

364/ *See id.*

365/ *See* VA Tr. at 4665 (Walsh).

366/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 36.

367/ *See id.* at 39.

AT&T's model similarly assumes the use of 100% Dedicated *Outside* Plant ("DOP"). This means that in the AT&T model, once a distribution pair terminated to the Feeder/ Distribution Interface ("FDI") has been assigned to a premises, it will, in every case, forever remain cross-wired to a specific feeder pair terminated on the central office side of the FDI. As the Commission noted, "AT&T admitted that it knows of no carrier that has attained 100% DOP."[368/] And for good reason: 100% DOP, like 100% DIP, is inconsistent with real-world practice, and far less efficient than the alternatives.[369/] In order to minimize the possibility of having to dig new trenches and lay new loops, Verizon DC designs distribution cables to meet maximum requirements for the area. But it would be extremely inefficient to run *each* line all the way from the customer premises to the central office, because, in reality, not *every* customer will use the maximum number of available lines. Thus, AT&T's 100% DOP presumption, like its 100% DIP presumption, would require massive additional investment in facilities (e.g., feeder cable) that would serve no valid purpose whatsoever, but would nonetheless dramatically increase recurring costs.[370/] Again, this approach is neither reasonable nor compatible with the recurring cost model adopted by the Commission in this case.

4. The Assumptions Underlying AT&T's Hot Cut Rates Are Not Supported By the Record.

The Commission also adopted AT&T's hot cut rates, which account for only the cost of "performing the essential hot cut activities at the switch."[371/] The Commission's decision is based on the erroneous conclusion that hot cut work is performed only at the switch and that

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368/ Opinion and Order ¶ 440.

369/ *See* VA Tr. at 4667 (Walsh).

370/ *See* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 48.

371/ Opinion and Order ¶ 448.

"[t]he costs for cross-connects are [already] captured in the recurring cost model."[372/] This conclusion ignores both the work that must be performed at the main distributing frame to connect the loop to the CLEC's switch, and the complicated coordination tasks that are necessary to ensure a successful hot cut.

First, the Commission has ignored substantial work activity at the main distributing frame. It is simply not true that the switch "is the only place in the network where hot cut work is performed."[373/] In fact, Verizon's NRCM shows that in a forward-looking TELRIC environment, its workers would spend an average of about 38 minutes per hot cut performing central office frame tasks necessary to moving a customer from Verizon's switch to a CLEC's.[374/] Moreover, it is not the case—as the Commission suggested—that "[t]he costs for cross-connects [associated with hot cuts] are captured in the recurring cost model" approved by the Commission.[375/] The cross-connects at issue here connect Verizon's network to the CLEC's, and are therefore not accounted for by the recurring cost model, which models only the costs of Verizon's network and accounts only for cross-connects necessary to render *that* network functional. By definition, the one-time costs of performing a cross-connect to connect a loop to a CLEC's network in response to an order for a loop UNE is a *non-recurring* cost. Indeed, while AT&T argues that the cost of a cross-connect at the FDI should be classified as recurring, even it

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372/ *Id.*

373/ *Id.* Although hot cuts *could* be performed at the switch it they could be done entirely electronically, the record evidence makes clear that such electronic provisioning would require the use of GR-303 technology to provision standalone loops. As explained above, however, the FCC and other state commissions have found that such use of GR-303 to provision unbundled loops electronically "ha[s] not proven practicable." *Georgia/Louisiana § 271 Order* at 9046 ¶ 50.

374/ VZ-DC Ex. C, Verizon NRCM, Tab 3.

375/ Opinion and Order ¶ 448.

does not claim that a cross-connect needed to connect a loop to a CLEC's network should be recurring.

Second, the Commission's reasoning assumes away all the coordination tasks necessary to ensure trouble-free cutovers and instead treats a hot cut as though that complicated procedure involved a simple cutover of a retail customer from one part of the Verizon switch to another. However, hot cuts require careful, and sometimes time-consuming, coordination among various Verizon organizations and between Verizon DC and the CLEC. Ironically, the hot cut procedures that the Commission's decision eliminates from Verizon DC's model are in place precisely because CLECs demanded them during industry meetings and § 271 collaboratives.[376/] AT&T in particular has repeatedly requested modifications to the hot cut process that increase the time and expense associated with each cutover.[377/]

Verizon DC's hot cut procedures comport with industry standards and are necessary to ensure that end user service is not interrupted during a migration.[378/] Moreover, the FCC has itself specifically "commend[ed] Bell Atlantic for" responding to CLEC demands by agreeing to engage in a pre-cutover visit to minimize problems and observed that such an additional visit "appears to be critical to the proper functioning of the hot cut process."[379/] AT&T's contrary characterization of hot cuts exposes its fundamental misrepresentation of the wholesale

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376/ VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 82-83.

377/ *Id.*

378/ *See* Press Release, Verizon Communications, "Verizon Wholesale Service Unit Receive International Quality Assurance Certification" (Jan. 7, 2002). As the FCC has noted, "[t]he ability of a BOC to provision working, trouble-free loops through hot cuts is of critical importance in view of the substantial risk that a defective cut will result in end-user customers experiencing service disruptions that continue for more than a brief period." Memorandum Opinion and Order, *In the Matter of Application by Bell Atlantic New York for Authorization Under § 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York*, 15 FCC Rcd 3953, 4109 ¶ 299 (1999) ("*New York § 271 Order*").

379/ *Id.* at 4052 ¶ 186.

provisioning process. Indeed, Verizon DC's analysis suggests that if the procedures AT&T advocates had been in place, **[BEGIN VERIZON DC PROPRIETARY]** XXXX **[END VERIZON DC PROPRIETARY]** of all customers who migrated from Verizon to AT&T would have been left without service for some period of time because AT&T was not prepared to serve the end user at the requisite time.[380/]

The Opinion and Order's various oversights and omissions have given rise to an outlandishly low total non-recurring hot cut rate of $2.18.[381/] This rate stands in stark contrast to the figures other state commissions have found to represent Verizon's TELRIC costs in other jurisdictions—$185.19 in New York,[382/] $159.76 in New Jersey,[383/] and $113.71 in Delaware.[384/] Indeed, the rate equals a mere 6% of the $35.00 *promotional* rate that Verizon has adopted in each of those states—a rate that the FCC has expressly found to be TELRIC-compliant.[385/] In contrast, the FCC has effectively rejected hot cut rates at the level set by the Commission, noting that it was "not persuaded . . . that a hot cut should cost less than $5.00."[386/] The FCC's holdings require reconsideration of the hot cut rates prescribed by the Commission here.

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380/ VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 83.

381/ This figure does not reflect the associated disconnect charge of $1.99 which the Commission found should be charged at the time of connection. Opinion and Order ¶ 161.

382/ *See New York Recommended Decision* Appx. C, Schedule 1.

383/ *See New Jersey UNE Order* Attachment (rate list).

384/ *See Delaware UNE Order* at 36.

385/ *New Jersey § 271 Order* at 12303 ¶ 65; *Delaware/New Hampshire § 271 Order* at 18713 ¶ 91.

386/ *New Jersey § 271 Order* at 12303 ¶ 64.

These fundamental defects in the AT&T non-recurring cost model, as well as numerous other flaws that are detailed in Verizon DC's testimony and briefs,[387/] render the AT&T model wholly unsuitable for use in setting non-recurring rates. Thus, it is not surprising that various other state commissions have rejected the AT&T model and that the FCC and numerous state commissions have accepted the Verizon model. The Commission's decision to adopt the AT&T model is wholly unsupported by the record. Moreover, the Commission's decision raises numerous complex issues such as how to fill in the gaps for UNEs for which the AT&T model does not produce non-recurring rates and how to account for the non-recurring costs the AT&T model assumes will be recovered on the recurring side. Accordingly, the Commission should reconsider its rejection of the Verizon NRCM, and—like the FCC and many other state commissions—determine that that model, with whatever adjustments the Commission deems necessary, is most appropriate for the development of non-recurring rates.

387/ For example, the AT&T model assumes that Verizon DC will employ a type of MDF that is not widely used and that understates costs associated with the placement of cross-connects, VA Tr. at 4665 (Walsh); ignores costs associated with the dispatch of a technician when such dispatches are essential to the provision of a UNE, *see* VZ-DC Ex. 2E (Non-Recurring Panel Reb.) at 45; and neglects to account for the additional costs associated with expedited orders, *see id.* at 69-70.

V. DSL SERVICES

A. Verizon's Costs Related To Loop Qualification and Line Conditioning Are Forward-Looking and Should Be Allowed.

1. The Commission Offers No Valid Reason To Deny Or Lower Verizon's Loop Qualification Costs.

a) Mechanized Loop Qualification

The Commission's treatment of Verizon's mechanized loop qualification costs is flawed on two levels. First, the Commission's adoption of a "per query" charge instead of Verizon's proposed monthly recurring charge to recover the cost of the loop qualification database fails to account for how Verizon DC provides CLECs with access to that database. In many cases, Verizon DC has no way to track how many queries a CLEC makes because Verizon DC provides CLECs, at their request, an extract of the loop qualification database itself, which CLECs can then query themselves without accessing Verizon's systems. Verizon has no way of determining how many times those CLECs access loop qualification information if they have availed themselves of this option. Thus, a per query charge would not permit Verizon DC to recover the substantial costs associated with developing and maintaining its loop qualification database. A recurring charge spread among all DSL-capable loops, on the other hand, as Verizon proposed, would permit Verizon DC to recover its costs, while at the same time permitting it to provide CLECs with access to the loop qualification information in ways that may be more convenient and efficient for the CLECs and Verizon DC. In the alternative, Verizon should at a minimum be permitted to assess a charge on those CLECs that order an extract of the entire database, in addition to those that access the database on a per-query basis. Verizon NJ determined that the cost of providing an extract of the entire database to a CLEC is $2,511 when the New Jersey

Commission ordered Verizon to model non-recurring costs for mechanized loop qualification services, Verizon demonstrated that the cost per query is $1.96.

Second, even if a per-query system could fairly recover Verizon's loop qualification costs (which it cannot), such costs greatly exceed the per-query cost of $0.001 for accessing Line Information Database ("LIDB"), on which the Commission based the mechanized loop qualification charges it adopted. Indeed, the record simply does not support a finding that the costs for the loop qualification database are the same as those for LIDB. LIDB is part of a nation-wide infrastructure used for every call that assists with administrative services such as alternate billing services (including calling card validation), calling name display, and fraud prevention. The costs of LIDB reflect the use of the telephone signaling network (SS7), transport to the SS7 network, Fraud Prevention Center costs, and other items that are totally unrelated to DSL. The loop qualification database, by contrast, is a local database of information regarding particular loops that is used to store information needed to process particular CLEC orders for DSL service.

Given the vastly different nature of the two databases, there is no reason to think that the costs of submitting a query to LIDB are in any way related to the costs of submitting an inquiry to the loop qualification database, and nothing in the record supports such a comparison. The Commission's assumption that "the sensitivity studies of recurring costs demonstrate that the cost per query is constant, regardless of the database,"[388/] apparently is based on the fact that the per-query costs of particular LIDB-related databases are comparable. However, those databases and the underlying queries all operate in a similar manner. Moreover, because a query is required for every call, there are literally millions of queries across which to spread the costs.

388/ Opinion and Order ¶ 462.

The loop qualification database, on the other hand, uses completely different processes and, under the Commission's proposal, the costs would be recovered over a far smaller number of queries—rather than spreading database costs across every call made by a customer, the loop qualification charge would be imposed only once for every CLEC order for DSL service. Thus, there is simply no reason whatsoever to believe that the per-query charge for LIDB databases is an appropriate proxy for recovering Verizon DC's loop qualification database costs. Indeed, when the New Jersey commission ordered Verizon to model a per-query charge for access to the loop qualification database, Verizon demonstrated that the cost per query is $1.96.

Thus, the Commission should reject a per-query loop qualification charge, and adopt Verizon's recurring cost. In the alternative, the Commission must set a per-query charge substantially greater than the LIDB per-query charge of a fraction of a penny, comparable to the $1.96 that Verizon demonstrated would be appropriate in New Jersey.

b) Manual Loop Qualification

The Commission, while acknowledging the necessity of manual activities related to loop qualification, denied Verizon's proposed costs to recover for those activities, instead allowing Verizon to recover only for some unexplained "core activities" totaling 18.7 minutes.[389/] The Commission never identified these so-called "core activities," how it arrived at 18.7 minutes of time, or why the "non-core" activities are supposedly unnecessary. The Commission's ruling ignores the extensive manual labor required to determine if a loop is qualified to provide DSL services. If a CLEC requests information about a loop that is not contained in the mechanized system, an engineer must pore over voluminous records and cable plats to determine if there are any impediments to DSL services on the lines. This is clearly a labor-intensive task that neither

389/ *Id.* ¶ 463.

the Commission nor AT&T denies is necessary. As Verizon demonstrated, the forward-looking time necessary to complete these tasks is between an hour and a half and two hours. Verizon should be compensated for the work it undisputedly incurs to fulfill CLEC orders.

2. AT&T's Non-Recurring Cost Model Provides No Support For Rejecting Verizon's Line Conditioning Costs.

The Commission seems to acknowledge that Verizon DC will incur costs to condition lines to make them DSL-compatible, discussing the states that have allowed such costs and the amount of Verizon's costs.[390/] Despite that acknowledgement, the Commission inexplicably rejected *any* recovery of these costs at all, reasoning that because AT&T's non-recurring cost model allows zero conditioning costs, the Commission must do the same.[391/] As explained in detail above, AT&T's non-recurring model is deeply flawed and is an inappropriate basis for determining non-recurring costs in the District. Even if the Commission erroneously were not to reconsider its approval of AT&T's model, it does not follow that the Commission should also reject Verizon DC's loop conditioning costs. AT&T's model does not assume that costs for loop conditioning are recovered in recurring costs. Rather, AT&T's allowance of zero loop conditioning costs flows from its erroneous assumption that impediments to DSL services, such as load coils and bridged taps, will not *exist* in the forward-looking environment, such that there will be no need to remove them. But the Commission already rejected that premise in allowing Verizon DC to recover the loop qualification database costs associated with determining whether those impediments are present on a given line, thus properly acknowledging that the impediments will exist in a forward-looking environment. And if they exist, as the Commission

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390/ *Id.* ¶¶ 475-76.

391/ *Id.* ¶ 477.

acknowledged they will, they will need to be removed to provide DSL service. Thus, prohibiting Verizon from recovering those costs is inconsistent with the Commission's own findings.

The Commission's rejection of Verizon's loop conditioning costs is also inconsistent with the FCC's orders and the decisions of nearly every state commission to consider the issue. The FCC has unequivocally ruled at least three times that ILECs are entitled to recover conditioning costs. Indeed, in the *UNE Remand Order*, the FCC not only upheld the recoverability of loop conditioning costs, but also went further and ruled that load coil removal costs would be recoverable even where load coil placement would not be deployed under current network standards and therefore would not be part of a "forward-looking" recurring cost network:

> In the *Local Competition First Report and Order*, the Commission also stated that requesting carriers would compensate the incumbent LECs for the cost of conditioning the loop. Covad and Rhythms argue that, because loops under 18,000 feet generally should not require devices to enhance voice transmission, the requesting party should not be required to compensate the incumbent for removing such devices on lines of that length or shorter.
>
> We agree that networks built today normally should not require voice-transmission enhancing devices on loops of 18,000 feet or shorter. Nevertheless, the devices are sometimes present on such loops, and the incumbent LEC may incur costs in removing them. Thus, under our rules, the incumbent should be able to charge for conditioning such loops.[392/]

[392/] Third Report and Order and Fourth Further Notice of Proposed Rulemaking, *Implementation of the Local Competition Provisions of the Telecommunications Act 1996*, 15 FCC Rcd 3696, 3784 ¶¶ 192-93 (1999) ("*UNE Remand Order*") (footnotes omitted) (emphasis added); *see also Local Competition Order* at 15692 ¶ 382 ("[S]ome modification of incumbent LEC facilities, such as loop conditioning, is encompassed within the duty imposed by § 251(c)(3). *The requesting carrier would, however, bear the cost of compensating the incumbent LEC for such conditioning*.") (emphasis added); Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 14 FCC Rcd 20912, 20952, 20954 ¶¶ 82, 87 (1999) ("*Line Sharing Order*") ("[W]e conclude that incumbent LECs should be able to charge for conditioning loops when competitors request the high frequency portion of the loop."); *New York § 271 Order* at 4091 ¶ 259.

The FCC reaffirmed to the Supreme Court that its "express . . . directions" make clear that incumbent LECs are not required to condition loops for advanced services "for free."[393/]

The Commission's decision is also inconsistent with almost every state commission to consider this issue. For example, the New Jersey commission affirmed Verizon's right to charge CLECs for loop conditioning on lines more than 18,000 feet from the central office (which is what Verizon DC proposes here as well).[394/] The Maine commission concluded that "Bell Atlantic should . . . be able to [condition] the lines and charge an appropriate amount for that [conditioning]."[395/] The Illinois commission similarly concluded that the "FCC sanctions . . . collection of TELRIC based charges for loop conditioning."[396/] Commissions in New York, Washington, Minnesota, North Carolina, Michigan, and Missouri have also approved the imposition of loop conditioning costs.[397/]

393/ VZ-DC Cross Ex. 10 (FCC Reply Brief) at 10 n.7. The FCC also has recognized the substantial costs that incumbent LECs must incur, noting that loop conditioning "can be expensive." *Line Sharing Order* at 20919 ¶ 8 n.9.

394/ Summary Order of Approval, *Board's Review of Unbundled Network Element Rates, Terms and Conditions of Bell Atlantic, New Jersey, Inc.*, Docket No. TO00060356, NJ B.P.U. 9 (Nov. 20, 2001).

395/ The Maine PUC included what Verizon DC here refers to as "conditioning" in its discussion of "qualification." Order (Part 1 Issues E3 & E7) (Final Order for all Other Issues), *Mid-Maine Telplus Request for Arbitration of an Interconnection Agreement with Bell Atlantic*, Docket Nos. 98-593 & 98-806, ME P.U.C. 27 (Mar. 25, 1999).

396/ Order, *Illinois Commerce Commission On Its Own Motion v. Illinois Bell Telephone Co. Investigation of Construction Charges*, No. 99-0593, 2000 Ill. P.U.C. Lexis 654, at *157 (Ill. C.C. Aug. 15 2000).

397/ *New York UNE Order* at 143-144; 17th Supplemental Order, *Interim Order Determining Prices; Notice of Pre-hearing Conference*, Docket Nos. UT-960370 & UT-960371 WA U.T.C., 3 (Sept. 23, 1999); Order Resolving Issues After Reconsideration and Approving Contract, *Consolidated Petitions of AT&T Communications of the Midwest, Inc. et al.*, Docket. Nos. P-442, 421, *et. al.*, 1997 MN P.U.C. LEXIS 49, at 11-18 (MN P.U.C., Mar. 17, 1997); Arbitration Order, *Petition of Dieca Communications Inc.*, Case No. TO-2000-322, 2000 MO P.U.C. LEXIS 260, at *17 (MO P.S.C., Mar. 23, 2000); Recommended Order, *Re General Proceeding to Determine Permanent Pricing for Unbundled Network Elements*, Docket No. P-100 Sub 133d, 2001 WL 811182, at *24 (NC U.C., June 7, 2001); Opinion and Order, *Ameritech Michigan*, Case No. U-12540, 2001 WL 306699, at *9 (MI P.S.C., Mar. 7, 2001).

In the end, AT&T's assumptions and the Commission's adoption of those assumptions simply ignore the fundamental reality of providing DSL service. DSL is a *copper-based* technology. Because copper loops longer than 18,000 feet require components such as load coils to provide voice service, DSL services cannot be provided over such loops without qualification and conditioning.[398/] AT&T's apparent assumption that all loops will be DSL capable without the need for conditioning is simply wrong: in the forward-looking network, a significant portion of the loops would be all fiber and thus could not provide DSL service *at all*. In other words, Verizon would not be required to provide DSL service in the forward-looking network, because DSL service would not even exist. But, of course, the CLECs are demanding DSL service today and thus the non-recurring model must include the costs of qualifying and conditioning the copper loops over which DSL would have to be provided. Because the Commission offers no supportable basis to reject Verizon DC's loop qualification charges, the Commission should adopt those charges.[399/]

B. Verizon's Line Sharing and Cooperative Testing Costs Are Supported By the Record and Properly Borne By the CLEC Requesting DSL Service.

1. Line Sharing Related Costs

a) Splitter Support Costs

The Commission erroneously lowered Verizon's maintenance and repair costs for Option C, accepting Covad's unsupported argument that splitters require only one hour of maintenance a

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[398/] VZ-DC Ex. D (Recurring Panel Direct) at 91; *see also* Third Report and Order and Further Notice of Proposed Rulemaking Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, ¶ 204 n.390 (rel. Nov. 5, 1999) ("xDSL cannot work over fiber, and it generally requires a 'clean' (i.e., conditioned) copper loop.").

[399/] The same is true of ISDN electronics. As with loop conditioning, the Commission rejected these costs on the erroneous assumption that ISDN costs "would not be included in a forward-looking network architecture." Opinion and Order ¶ 506. But ISDN electronics, like the loop conditioning, are a reality of providing copper-based

year.[400/] In fact, splitter maintenance involves three separate functions: replacement of the splitter card and obtaining a new spare when necessary; joint testing of the card; and maintenance and return of the defective card. Verizon DC's charge accounts for the costs involved with all these activities. And the Commission is simply mistaken that Verizon DC's collocation charges already include support for splitters. The engineering costs associated with collocation are related to building the overall infrastructure of the collocation site itself; engineering costs for splitters are associated with the unique engineering necessary for an individual piece of equipment.

b) Splitter Installation Costs

The Commission correctly found that Verizon DC's proposed splitter installation costs were supported by the record and should be adopted.[401/] However, Table 8 of the Opinion and Order, which sets forth all the rates adopted by the Commission, inadvertently omits this non-recurring rate element.

Accordingly, the Commission should amend Table 8 to include a non-recurring rate of $1,469.53, labeled "Line Sharing Installation—Splitter for 96 Lines" in Verizon DC's compliance filing.

c) Per-Order Line Sharing NRC

The Commission disallowed Verizon's field dispatch costs related to provisioning new orders for line sharing based on a misunderstanding of Verizon's model. The Commission is

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DSL services. The forward-looking network the Commission imagines would not include ISDN electronics and also would not be capable of providing DSL.

400/ The Rate for Option C in Table 8 of the Opinion and Order is incorrect. The Commission adopted a rate of $4.23, *see* Opinion and Order ¶ 489, not a rate of $3.80. Thus, at a minimum, the Commission should correct this error.

401/ *Id.* ¶ 480.

correct that field dispatches related to provisioning line sharing orders will be rare, because there will always be a working loop in place. However, the Commission is incorrect that, because Verizon's non-recurring cost model reflects a 100% typical occurrence factor, Verizon "always" performs these activities. In reality, CLECs are charged for field dispatches only when a dispatch is necessary to provision the order or is specifically requested by the CLEC.[402/] The reason Verizon's model employs a 100% typical occurrence factor for field dispatches is that they are charged only when they are incurred—and thus the full cost will fall on the cost-causer. Thus, for example, if a field dispatch were to cost $40.00, the CLEC that requested a dispatch would be charged the full $40.00 regardless of whether dispatches were required to provision only one-tenth of *all* orders. A 10% typical occurrence factor, on the other hand, would mean that Verizon would charge *all* CLECs $4.00. But there is no support for the proposition that Verizon should recover only $4.00 and only when a dispatch is required, even though the cost it incurs is $40.00. Thus, Verizon's model uses a 100% typical occurrence factor so that the full cost is recovered, but assesses this charge only in the rare case that a CLEC requests a field dispatch in connection with line sharing. Line sharing customers benefit from this rate structure because, rather than paying $4.00 on all lines, they pay for field dispatches only in the instances in which they are required or requested.

In addition, some CLECs request Verizon to dispatch a technician even when it is not otherwise required. Verizon clearly should be permitted to recover the costs it actually incurs when such dispatches are requested by a CLEC. Some CLECs, for example, ask Verizon DC to

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402/ Contrary to the Commission's characterization, Verizon DC did explain this point, both in its testimony and in its briefs. *See* VZ-DC Post Hearing Initial Br. at n.433 ("As with DIP, CLECs obtain a "DOP" benefit when jumpers are left in place at the FDI, *because costs for a field dispatch are only charged in the minority of cases in which a cross-connect is needed*.") (emphasis added); VZ-DC Ex. E (Bennett Direct) at 32.

go to the field to place identification tags at the Network Interface Device ("NID"). The Commission should therefore permit Verizon DC to assess a non-recurring charge on the CLECs for this optional service; indeed, if there were no such charge, CLECs would have the incentive to request unwarranted and inefficient dispatches.

d) Line and Station Transfer

The Commission disallows Verizon's line and station transfer costs on the erroneous assumption that such costs are not proper because "the loop is in working condition."[403/] But a loop may be, and often is, "in working condition" for voice service, yet incapable of providing DSL service through a line sharing arrangement. Most fundamentally, because, as noted above, DSL can be provided only over copper, to provide DSL service to a customer served on DLC, Verizon must first switch that customer to a copper loop. Line and station transfers are thus appropriate to compensate Verizon for the necessary cost of moving a customer served on a loop that cannot support DSL services to a loop that can. Under AT&T's own cost causation principles, that work is caused by and thus properly charged to the requesting CLEC. Analogous costs are assessed to retail customers to compensate Verizon for the costs of dispatches necessary to provision orders for DSL services, except that they are proportionately applied to each and every order—whether or not a dispatch occurs. There is no reason to treat line and station transfers any differently.

2. Cooperative Testing

The Commission disallowed Verizon DC's proposed cooperative testing costs, reasoning that they are somehow included in Verizon DC's recurring costs, and that similar charges are not

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[403/] Opinion and Order ¶ 502.

imposed on retail customers.[404/] In so ruling, the Commission misapprehended the nature of cooperative testing. Cooperative testing is optional and performed *only* at the request of the CLEC.[405/] The Verizon DC technician spends additional time during the dispatch, working at the direction of the CLEC, to allow the CLEC to perform tests on the loop that it could not otherwise do. This provides the CLEC with confirmation that it would not otherwise receive, so that the CLEC can avoid having to dispatch its own technician. Clearly, retail customers do not ask Verizon to perform such testing on their behalf, so it is not surprising that they do not incur similar charges.

Moreover, cooperative testing charges are not double-recovered in Verizon's maintenance costs. Verizon specifically *excludes* all normal loop testing from the cooperative testing charge. That testing is built into the cost of the loop. Only customized, specifically requested additional testing is charged separately to the cost-causers, and the costs for such testing are not included in Verizon's recurring charges. The Commission accordingly should reconsider its decision and allow recovery of Verizon DC's cooperative testing costs.

404/ *Id.* ¶ 469.

405/ VZ-DC Ex. D (Recurring Panel Direct) at 105-07.

CONCLUSION

For the foregoing reasons, the Commission should grant Verizon DC's application for partial reconsideration and clarification of the Commission's Opinion and Order regarding UNE rates in the District of Columbia.

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